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<211> 2582

<212> DNA

<213> Homo sapiens

<400> 5329

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 <212> PRT  
 <213> Homo sapiens

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 Phe Gln Ile Asp Gly Tyr Val Thr Asp His Ile Glu Val Val Gln Asp  
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 Arg Arg Cys Lys Met His Lys Arg Arg Ile Ala Met Leu Glu Pro Leu  
 130 135 140  
 Thr Val Asp Leu Asn Pro Gln Tyr Tyr Leu Leu Val Asn Arg Gln Ile  
 145 150 155 160  
 Gln Phe Glu Ile Ala His Ala Tyr Tyr Asp Met Met Asp Leu Lys Val  
 165 170 175  
 Ala Ile Ala Asp Arg Leu Arg Asp Pro Asp Ser His Ile Val Lys Lys  
 180 185 190  
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 Asp Ser Leu Arg Asp Pro Asn Lys Val Phe Pro Glu His Ile Gly Glu  
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 225 230 235 240  
 Tyr Gly Lys Ile Ile Thr Ala Asp Pro Lys Lys Glu Leu Glu Asn Leu  
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 Ala Thr Ser Leu Glu His Tyr Lys Phe Ile Val Asp Tyr Cys Glu Lys

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Glu	Met	Val	Ser	Leu	Leu	Pro	Thr	Lys	Met	Glu	Arg	Phe	Arg	Thr	Lys
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 <212> PRT



<213> Homo sapiens

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			20					25				30			
Met	Ile	Thr	Asp	Ser	Gly	Lys	Phe	Ser	Gly	Ser	Ser	Pro	Ala	Pro	Pro
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<212> DNA

<213> Homo sapiens

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<210> 5334

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Ile Glu Gln Gly Asn Thr Lys Ala Leu Ala Val Val Tyr Gly Pro His
65           70           75           80
Glu Ile Arg Gly Ser Arg Ala Arg Ala Leu Pro Asp Arg Ala Leu Val
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&lt;210&gt; 5335

&lt;211&gt; 4282

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5335

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&lt;210&gt; 5337

&lt;211&gt; 2742

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5337

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<212> PRT

<213> Homo sapiens

<400> 5338

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<212> DNA

<213> Homo sapiens

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<211> 217

<212> PRT

<213> Homo sapiens

<400> 5340

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Glu	Glu	Ser	Gln	Asp	Glu	Asp	Asp	Ala	Leu	Asn	Glu	Ile	Val	Arg	Cys
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Arg	Trp	Ser	Ala	Lys	Tyr	Arg	Tyr	Asp	Lys	Glu	Trp	Leu	Asn	Asn	Gly
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&lt;212&gt; PRT

<213> Homo sapiens

<400> 5342

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&lt;210&gt; 5343

&lt;211&gt; 752

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5343

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&lt;210&gt; 5346

&lt;211&gt; 534

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5346

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 35 40 45  
 Cys Thr Ala Lys Val Gly Lys Ala His Val Tyr Cys Glu Gly Asn Asp



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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5347

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<211> 694

<212> PRT

<213> Homo sapiens

<400> 5348

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Ala	Leu	Gly	Val	Pro	Phe	Val	Pro	Arg	Thr	Ser	Val	Asp	Ala	Trp	Leu
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Val	His	Ser	Val	Ala	Ala	Gly	Ser	Ala	Asp	Glu	Ala	His	Gly	Leu	Leu
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Gly	Ala	Ala	Ala	Ala	Ser	Ser	Thr	Gly	Gly	Ala	Gly	Ala	Ser	Val	Asp
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Gly	Gly	Ser	Gln	Ala	Val	Gln	Gly	Gly	Cys	Gly	Asp	Ser	Arg	Ala	Ala
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Arg	Ser	Gly	Pro	Leu	Asp	Ala	Gly	Glu	Glu	Lys	Ala	Pro	Ala	Glu	
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Gln	Asn	Asp	Asp	Asp	Glu	Asn	Lys	Ile	Ala	Glu	Lys	Pro	Asp	Trp	Glu
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Ala	Glu	Lys	Thr	Thr	Glu	Ser	Arg	Asn	Glu	Arg	His	Leu	Asn	Gly	Thr
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Pro	Glu	Asn	Ser	Leu	Glu	Gly	Ile	Ser	Leu	Gly	Asp	Ile	Pro	Leu	Pro
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Gly	Ser	Ile	Ser	Asp	Gly	Met	Asn	Ser	Ser	Ala	His	Tyr	His	Val	Asn
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Phe	Ser	Gln	Ala	Ile	Ser	Gln	Asp	Val	Asn	Leu	His	Glu	Ala	Ile	Leu
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Leu	Cys	Pro	Asn	Asn	Thr	Phe	Arg	Arg	Asp	Pro	Thr	Ala	Arg	Thr	Ser
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Gln	Ser	Gln	Glu	Pro	Phe	Leu	Gln	Leu	Asn	Ser	His	Thr	Thr	Asn	Pro

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Asp Ile Asn Ile Phe Asp Glu Ile Asn Leu Met Ser Leu Ala Thr Glu
      385      390      395      400
Asp Asn Phe Asp Pro Ile Asp Val Ser Gln Leu Phe Asp Glu Ser Asp
      405      410      415
Ser Asp Ser Gly Leu Ser Leu Asp Ser Ser His Asn Asn Thr Ser Val
      420      425      430
Ile Lys Ser Asn Ser Ser His Ser Val Cys Asp Glu Gly Ala Ile Gly
      435      440      445
Tyr Cys Thr Asp His Glu Ser Ser Ser His His Asp Leu Glu Gly Ala
      450      455      460
Val Gly Gly Tyr Tyr Pro Glu Pro Ser Lys Leu Cys His Leu Asp Gln
      465      470      475      480
Ser Asp Ser Asp Phe His Gly Asp Leu Thr Phe Gln His Val Phe His
      485      490      495
Asn His Thr Tyr His Leu Gln Pro Thr Ala Pro Glu Ser Thr Ser Glu
      500      505      510
Pro Phe Pro Trp Pro Gly Lys Ser Gln Lys Ile Arg Ser Arg Tyr Leu
      515      520      525
Glu Asp Thr Asp Arg Asn Leu Ser Arg Asp Glu Gln Arg Ala Lys Ala
      530      535      540
Leu His Ile Pro Phe Ser Val Asp Glu Ile Val Gly Met Pro Val Asp
      545      550      555      560
Ser Phe Asn Ser Met Leu Ser Arg Tyr Tyr Leu Thr Asp Leu Gln Val
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Gln Asn Cys Arg Lys Arg Lys Leu Asp Ile Ile Leu Asn Leu Glu Asp
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Asp Val Cys Asn Leu Gln Ala Lys Lys Glu Thr Leu Lys Arg Glu Gln
      610      615      620
Ala Gln Cys Asn Lys Ala Ile Asn Ile Met Lys Gln Lys Leu His Asp
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Val Asn Pro Asn His Tyr Ala Leu Gln Cys Thr His Asp Gly Ser Ile
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Gln Lys Gly Lys Arg Lys
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&lt;210&gt; 5349

&lt;211&gt; 425

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5349

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<211> 134

<212> PRT

<213> Homo sapiens

<400> 5350

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			20					25					30		
Leu	Gly	Lys	His	His	Thr	Ser	Arg	Glu	Pro	Gln	Ala	Gln	Pro	Lys	Pro
		35					40					45			
His	Lys	Val	Ser	Ser	Gln	Glu	Gly	Glu	Gly	Arg	Ile	Pro	Leu	Pro	Gly
	50				55					60					
Lys	Ala	Glu	Val	Arg	Glu	Ala	Gly	Gln	Pro	Ile	Pro	Val	Ser	Leu	Leu
65				70				75						80	
Leu	Leu	Ser	Pro	Lys	Lys	Ala	Leu	Thr	Leu	Leu	Ala	Thr	Ala	Gln	Gly
			85					90						95	
Gly	His	Glu	Gly	Leu	Gly	Arg	Leu	Leu	Trp	Gln	Ser	Gly	Pro	Leu	Gln
		100					105						110		
Pro	Arg	Pro	Glu	Lys	Lys	Arg	Thr	Pro	Lys	Ser	Phe	Trp	Leu	Pro	Val
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<212> DNA

<213> Homo sapiens

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&lt;211&gt; 1596

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5355

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<211> 245

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&lt;400&gt; 5357

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&lt;213&gt; Homo sapiens

&lt;400&gt; 5358

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<210> 5364

<211> 187

<212> PRT

<213> Homo sapiens

<400> 5364

Ala	Ala	Leu	Pro	Ser	Arg	Cys	Pro	Leu	Gln	Pro	Arg	Gln	Pro	Trp	Arg
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Arg	Trp	Arg	Lys	Arg	Ala	Leu	Gly	Arg	Leu	Gln	Gly	Xaa	Gly	Pro	Gln
			20					25					30		
Pro	Gly	Leu	Tyr	Ser	Tyr	Ile	Arg	Asp	Asp	Leu	Phe	Thr	Ser	Glu	Ile
		35				40					45				
Phe	Lys	Leu	Glu	Leu	Gln	Asn	Ala	Pro	Arg	His	Ala	Ser	Phe	Ser	Asp
	50				55					60					
Val	Arg	Arg	Phe	Leu	Gly	Arg	Phe	Gly	Leu	Gln	Pro	His	Lys	Thr	Lys
65					70				75						80
Leu	Phe	Gly	Gln	Pro	Pro	Cys	Ala	Phe	Val	Thr	Phe	Arg	Ser	Ala	Ala
			85					90					95		
Glu	Arg	Asp	Lys	Ala	Leu	Arg	Val	Leu	His	Gly	Ala	Leu	Trp	Lys	Gly
		100						105					110		
Arg	Pro	Leu	Ser	Val	Ala	Trp	Pro	Gly	Pro	Arg	Pro	Thr	Pro	Trp	Pro
		115				120						125			
Gly	Gly	Gly	Xaa	Gln	Glu	Gly	Glu	Ser	Glu	Pro	Pro	Val	Thr	Arg	Xaa
	130				135					140					
Gly	Arg	Arg	Gly	Asp	Pro	Ser	Met	Asp	Ser	Ala	Leu	Xaa	Leu	Ser	Ser
145					150					155				160	
Leu	Ser	Gly	Ser	Ser	Trp	Ser	Ala	Ser	Arg	Cys	Cys	Arg	Asn	Xaa	Ala
			165					170					175		
Gln	Glu	Ile	Gly	Ser	Thr	Asn	Arg	Ala	Leu	Arg					
		180						185							

<210> 5365

<211> 1824



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5365

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120  
gaactcgcca gaaaactgca ggaggaagct acgtgctcca tctgtctgga ttacttcaca  
180  
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240  
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300  
tgcagagaga tgtccccgca gaggaacctg ctgcccacc ggctgctgac caaggtggcc  
360  
gagatggcgc agcagcatcc tggctctgcag aagcaagacc tgtgccagga gcaccacgag  
420  
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480  
cgggagcacc ggctgcacag ggtgctgcc gccgaggagg cagtgcaggg gtacaagtgtg  
540  
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600  
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720  
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780  
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840  
caggggcccc tccagatgct gcaggacatg aaggaacccc tgagcaggaa gaacaacgtg  
900  
agtgtgcagt gccagaggt tgcccccca accagaccca ggactgtgtg cagagtcccc  
960  
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1020  
taccctacc tctcctgta tgagagccgc cagaggcgt acctcggctc ttcgccggag  
1080  
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1140  
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1440  
caggccacct tcccaggccc cctgcagcct ttcttctgcc tgggggctcc gaagtctggt  
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<210> 5366

<211> 477

<212> PRT

<213> Homo sapiens

<400> 5366

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Ser	Ile	Cys	Leu	Asp	Tyr	Phe	Thr	Asp	Pro	Val	Met	Thr	Thr	Cys	Gly
			20					25					30		
His	Asn	Phe	Cys	Arg	Ala	Cys	Ile	Gln	Leu	Ser	Trp	Glu	Lys	Ala	Arg
		35					40					45			
Gly	Lys	Lys	Gly	Arg	Arg	Lys	Arg	Lys	Gly	Ser	Phe	Pro	Cys	Pro	Glu
	50					55					60				
Cys	Arg	Glu	Met	Ser	Pro	Gln	Arg	Asn	Leu	Leu	Pro	Asn	Arg	Leu	Leu
65					70				75					80	
Thr	Lys	Val	Ala	Glu	Met	Ala	Gln	Gln	His	Pro	Gly	Leu	Gln	Lys	Gln
				85					90					95	
Asp	Leu	Cys	Gln	Glu	His	His	Glu	Pro	Leu	Lys	Leu	Phe	Cys	Gln	Lys
			100					105					110		
Asp	Gln	Ser	Pro	Ile	Cys	Val	Val	Cys	Arg	Glu	Ser	Arg	Glu	His	Arg
		115					120					125			
Leu	His	Arg	Val	Leu	Pro	Ala	Glu	Glu	Ala	Val	Gln	Gly	Tyr	Lys	Leu
	130					135					140				
Lys	Leu	Glu	Glu	Asp	Met	Glu	Tyr	Leu	Arg	Glu	Gln	Ile	Thr	Arg	Thr
145					150					155					160
Gly	Asn	Leu	Gln	Ala	Arg	Glu	Glu	Gln	Ser	Leu	Ala	Glu	Trp	Gln	Gly
			165						170					175	
Lys	Val	Lys	Glu	Arg	Arg	Glu	Arg	Ile	Val	Leu	Glu	Phe	Glu	Lys	Met
		180						185					190		
Asn	Leu	Tyr	Leu	Val	Glu	Glu	Glu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu
	195						200					205			
Thr	Glu	Glu	Glu	Glu	Thr	Ala	Ser	Arg	Leu	Arg	Glu	Ser	Val	Ala	Cys
	210					215					220				
Leu	Asp	Arg	Gln	Gly	His	Ser	Leu	Glu	Leu	Leu	Leu	Gln	Leu	Glu	
225					230				235					240	
Glu	Arg	Ser	Thr	Gln	Gly	Pro	Leu	Gln	Met	Leu	Gln	Asp	Met	Lys	Glu
			245						250					255	
Pro	Leu	Ser	Arg	Lys	Asn	Asn	Val	Ser	Val	Gln	Cys	Pro	Glu	Val	Ala
		260						265					270		
Pro	Pro	Thr	Arg	Pro	Arg	Thr	Val	Cys	Arg	Val	Pro	Gly	Gln	Ile	Glu

275								280				285							
Val	Leu	Arg	Gly	Phe	Leu	Glu	Asp	Val	Val	Pro	Asp	Ala	Thr	Ser	Ala				
290							295	300											
Tyr	Pro	Tyr	Leu	Leu	Leu	Tyr	Glu	Ser	Arg	Gln	Arg	Arg	Tyr	Leu	Gly				
305	310					315							320						
Ser	Ser	Pro	Glu	Gly	Ser	Gly	Phe	Cys	Ser	Lys	Asp	Arg	Phe	Val	Ala				
325				330							335								
Tyr	Pro	Cys	Ala	Val	Gly	Gln	Thr	Ala	Phe	Ser	Ser	Gly	Arg	His	Tyr				
340				345							350								
Trp	Glu	Val	Gly	Met	Asn	Ile	Thr	Gly	Asp	Ala	Leu	Trp	Ala	Leu	Gly				
355				360							365								
Val	Cys	Arg	Asp	Asn	Val	Ser	Arg	Lys	Asp	Arg	Val	Leu	Lys	Cys	Pro				
370					375							380							
Glu	Asn	Gly	Phe	Trp	Val	Val	Gln	Leu	Ser	Lys	Gly	Thr	Lys	Tyr	Leu				
385	390					395							400						
Ser	Thr	Phe	Ser	Ala	Leu	Thr	Pro	Val	Met	Leu	Met	Glu	Pro	Pro	Ser				
405				410							415								
His	Met	Gly	Ile	Phe	Leu	Asp	Phe	Glu	Ala	Gly	Glu	Val	Ser	Phe	Tyr				
420				425							430								
Ser	Val	Ser	Asp	Gly	Ser	His	Leu	His	Thr	Tyr	Ser	Gln	Ala	Thr	Phe				
435				440							445								
Pro	Gly	Pro	Leu	Gln	Pro	Phe	Phe	Cys	Leu	Gly	Ala	Pro	Lys	Ser	Gly				
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Gln	Met	Val	Ile	Ser	Thr	Val	Thr	Met	Trp	Val	Lys	Gly							
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<210> 5367
<211> 549
<212> DNA
<213> Homo sapiens
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gagtctcagg ggctggggat gctgcccccg aagcccccta cttttgggga gttcctgtcc
180
cagcaciaaag ctgaggccag cagccgcaga aggagaaaaga gcagtcggcc ccaggccaag
240
gcagcggcca gggcctacag tgaccatgat gaccgctggg agacaaaaga aggggcagca
300
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360
atgcagccac ccgagatccc agctcctgcc caccggcctc ctgaagacga gggggaagag
420
aatgaggggg aagaggatga agaatgggag gacataagtg aggatgagga agaggaggag
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540
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549

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<210> 5368

<211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 5368

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Lys Ala Glu Ala Ser Ser Arg Arg Arg Lys Ser Ser Arg Pro Gln
 20           25           30
Ala Lys Ala Ala Pro Arg Ala Tyr Ser Asp His Asp Asp Arg Trp Glu
 35           40           45
Thr Lys Glu Gly Ala Ala Ser Pro Ala Pro Glu Thr Pro Gln Pro Thr
 50           55           60
Ser Pro Glu Thr Ser Pro Lys Glu Thr Pro Met Gln Pro Pro Glu Ile
 65           70           75           80
Pro Ala Pro Ala His Arg Pro Pro Glu Asp Glu Gly Glu Glu Asn Glu
 85           90           95
Gly Glu Glu Asp Glu Glu Trp Glu Asp Ile Ser Glu Asp Glu Glu Glu
 100          105          110
Glu Glu Ile Glu Val Glu Glu Gly Asp Glu Glu Glu Pro Ala Gln Asp
 115          120          125
His Gln Ala Pro Glu Ala Ala Pro Thr
 130          135

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<210> 5369  
 <211> 646  
 <212> DNA  
 <213> Homo sapiens

<400> 5369

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 120
cagcagcagc agctcctgca gccgcggccc tcgcccgtgg gcagcagcgg gcccgagccc
 180
cccggggggc agcccgcagg catgaaggac ctggacgcca tcaaactctt cgtggggccag
 240
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 300
tacgagctca cgggtgctcaa agacccttac acgggggatgc acaaagggtgg gcgcccggcc
 360
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 480
cttaccctct cctcccacc caccctcctt cccctctctg ggggtgcagc tgacagatcc
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 646

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<210> 5370

<211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 5370  
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 20 25 30  
 Ile Tyr Glu Leu Thr Val Leu Lys Asp Pro Tyr Thr Gly Met His Lys  
 35 40 45  
 Gly Gly Arg Pro Ala Pro Ser Pro Leu Ser Pro Ser Leu Arg Leu Pro  
 50 55 60  
 Pro His Leu Pro Ala Ser Ser Leu Pro His His His Pro Ser Ser Ala  
 65 70 75 80  
 His Leu Pro Pro Leu Pro Ala Ser Ala Gly Ala Ser Val Leu Thr Pro  
 85 90 95  
 Ser Leu Pro Pro Thr Pro Pro Pro Leu Ser Gly Gly Ala Ala Asp Arg  
 100 105 110  
 Ser Glu Arg Ala Pro Ser Pro Pro Pro Pro Leu Pro Pro Ser Pro  
 115 120 125  
 Pro Ser Gly Ile Ser Ser Leu Ser Pro Ser Leu Ser Pro Ser Leu Ser  
 130 135 140  
 Pro Phe Leu Phe  
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<210> 5371  
 <211> 1177  
 <212> DNA  
 <213> Homo sapiens

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 180  
 tggaagcact tcaactgcctc cctggccccc cgcattgtcca accagggcat cgcgggtgctc  
 240  
 aacaacttcg tatacttgat tggaggggac aacaatgtcc aaggatttcg agcagagtcc  
 300  
 cgatgctgga ggtatgaccc acggcacaac cgctggnttc cagatccagt ccctgcagca  
 360  
 ggagcacgcc gacctgtcnn cgtgtgtgtt gtaggcaggt acatctacgc tgtggcgggc  
 420  
 cgtgactacc acaatgacct gaatgctgtg gagcgctacg accctgccac caactcctgg  
 480  
 gcatacgtgg cccactcaa gagggaggtg tatgccacg caggcgcgac gctggagggg  
 540  
 aagatgtata tcacctgcgg ccgcagaggg gaggattacc tgaaagagac aactgctac  
 600  
 gatccaggca gcaacacttg gcacacactg gctgatgggc ctgtgcggcg cgctggcac  
 660

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 780  
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 1080  
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<210> 5372

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5372

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Pro	Ser	Leu	Gln	Ser	Pro	Gln	Thr	Glu	Leu	Arg	Ser	Asp	Phe	Gln	Cys
			20					25					30		
Val	Val	Gly	Phe	Gly	Gly	Ile	His	Ser	Thr	Pro	Ser	Thr	Val	Leu	Ser
		35				40						45			
Asp	Gln	Ala	Lys	Tyr	Leu	Asn	Pro	Leu	Leu	Gly	Glu	Trp	Lys	His	Phe
	50					55					60				
Thr	Ala	Ser	Leu	Ala	Pro	Arg	Met	Ser	Asn	Gln	Gly	Ile	Ala	Val	Leu
65					70					75				80	
Asn	Asn	Phe	Val	Tyr	Leu	Ile	Gly	Gly	Asp	Asn	Asn	Val	Gln	Gly	Phe
			85					90					95		
Arg	Ala	Glu	Ser	Arg	Cys	Trp	Arg	Tyr	Asp	Pro	Arg	His	Asn	Arg	Trp
			100					105					110		
Xaa	Pro	Asp	Pro	Val	Pro	Ala	Ala	Gly	Ala	Arg	Arg	Pro	Val	Xaa	Val
		115						120					125		
Cys	Val	Val	Gly	Arg	Tyr	Ile	Tyr	Ala	Val	Ala	Gly	Arg	Asp	Tyr	His
	130					135					140				
Asn	Asp	Leu	Asn	Ala	Val	Glu	Arg	Tyr	Asp	Pro	Ala	Thr	Asn	Ser	Trp
145					150					155				160	
Ala	Tyr	Val	Ala	Pro	Leu	Lys	Arg	Glu	Val	Tyr	Ala	His	Ala	Gly	Ala
			165					170						175	
Thr	Leu	Glu	Gly	Lys	Met	Tyr	Ile	Thr	Cys	Gly	Arg	Arg	Gly	Glu	Asp
		180						185					190		
Tyr	Leu	Lys	Glu	Thr	His	Cys	Tyr	Asp	Pro	Gly	Ser	Asn	Thr	Trp	His
	195						200					205			
Thr	Leu	Ala	Asp	Gly	Pro	Val	Arg	Arg	Ala	Trp	His	Gly	Met	Ala	Thr
	210					215						220			
Leu	Leu	Asn	Lys	Leu	Tyr	Val	Ile	Gly	Gly	Ser	Asn	Asn	Asp	Ala	Gly

225		230		235		240
Tyr Arg Arg Asp Val His Gln Val Ala Cys Tyr Ser Cys Thr Ser Gly						
	245		250		255	
Gln Trp Ser Ser Val Cys Pro Leu Pro Ala Gly His Gly Glu Pro Gly						
	260		265		270	
Ile Ala Val Leu Asp Asn Arg Ile Tyr Val Leu Gly Gly Arg Ser His						
	275		280		285	
Asn Arg Gly Ser Arg Thr Gly Tyr Val His Ile Tyr Asp Val Glu Lys						
	290		295		300	
Asp Cys Trp Glu Glu Gly Pro Gln Leu Asp Asn Ser Ile Ser Gly Leu						
305		310		315		320
Ala Ala Cys Val Leu Thr Leu Pro Arg Ser Leu Leu Leu Glu Pro Pro						
	325		330		335	
Arg Gly Thr Pro Asp Arg Ser Gln Ala Asp Pro Asp Phe Ala Ser Glu						
	340		345		350	
Val Met Ser Val Ser Asp Trp Glu Phe Asp Asn Ser Ser Glu Asp						
	355		360		365	

&lt;210&gt; 5373

&lt;211&gt; 4221

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5373

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120
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180
accgcgaga agaaaagtct tcaggaaaaa ggcaagttat cagctgaaga aaatcccgat
240
gactctgaag ttccatcatc atcaggaatt aactctacca aatccaaga caaagatgtc
300
aatgaaggag aaacatcaga tggagtggag aagtcagttc acaaggtctt tgcttccatg
360
cttggagaga atgaagatga tgaggaggaa gaggaagaag aggaggagga ggaggaggag
420
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780
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900

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 1380  
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 1920  
 aaagcaatat ttgctgtgct cacaagcgtc ttgacaaagg atgactggtg gaatcttctg  
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 <213> Homo sapiens

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785		790		795
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	805		810	815
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Tyr Tyr Gln Lys Ala Leu Glu Leu Pro Pro Leu Val Val Glu Gly Ile				
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Glu Leu Asp Gln Leu Asp Leu Arg Arg Asp Ile Ala Tyr Asn Leu Ser				
	850		855	860
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&lt;210&gt; 5375

&lt;211&gt; 526

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5375

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&lt;210&gt; 5376

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5376

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Cys His Arg Pro Arg Thr Ile Ser Ile Phe Asn Pro Arg Asn His Thr		
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&lt;210&gt; 5377

&lt;211&gt; 1452

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5377

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<212> PRT

<213> Homo sapiens

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&lt;213&gt; Homo sapiens

&lt;400&gt; 5379

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 3213

&lt;210&gt; 5380

&lt;211&gt; 903

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5380

Met	Pro	Pro	Thr	Glu	Asp	Arg	Ser	Trp	Trp	Arg	Gly	Lys	Arg	Gly	Phe
1				5				10					15		
Gln	Leu	Cys	His	Gly	Leu	Val	Gly	Ser	Trp	Pro	Ala	Cys	Ser	Ala	Pro
			20				25					30			
Ser	Cys	Ala	Pro	Ala	Leu	Leu	Gly	Ser	Gly	Cys	Gly	Ser	Gly	Glu	Ser
		35				40					45				
Cys	Asp	Arg	Gly	Cys	Leu	Ala	Ile	Leu	Ala	Ser	Thr	Ser	Ala	Thr	
	50				55				60						
Gln	Ala	Arg	Met	Val	Leu	Arg	Cys	Cys	Ser	Glu	Phe	Ile	Glu	Ala	His
65				70					75				80		
Gly	Val	Val	Asp	Gly	Ile	Tyr	Arg	Leu	Ser	Gly	Val	Ser	Ser	Asn	Ile
			85					90					95		
Gln	Arg	Leu	Arg	His	Glu	Phe	Asp	Ser	Glu	Arg	Ile	Pro	Glu	Leu	Ser
		100					105					110			
Gly	Pro	Ala	Phe	Leu	Gln	Asp	Ile	His	Ser	Val	Ser	Ser	Leu	Cys	Lys
		115				120					125				
Leu	Tyr	Phe	Arg	Glu	Leu	Pro	Asn	Pro	Leu	Leu	Thr	Tyr	Gln	Leu	Tyr
	130				135						140				
Gly	Lys	Phe	Ser	Glu	Ala	Met	Ser	Val	Pro	Gly	Glu	Glu	Glu	Arg	Leu
145				150					155					160	
Val	Arg	Val	His	Asp	Val	Ile	Gln	Gln	Leu	Pro	Pro	Pro	His	Tyr	Arg
			165					170					175		
Thr	Leu	Glu	Tyr	Leu	Leu	Arg	His	Leu	Ala	Arg	Met	Ala	Arg	His	Ser
		180				185						190			
Ala	Asn	Thr	Ser	Met	His	Ala	Arg	Asn	Leu	Ala	Ile	Val	Trp	Ala	Pro
		195				200					205				
Asn	Leu	Leu	Arg	Ser	Met	Glu	Leu	Glu	Ser	Val	Gly	Met	Gly	Gly	Ala
	210					215					220				
Ala	Ala	Phe	Arg	Glu	Val	Arg	Val	Gln	Ser	Val	Val	Val	Glu	Phe	Leu

225                      230                      235                      240  
 Leu Thr His Val Asp Val Leu Phe Ser Asp Thr Phe Thr Ser Ala Gly  
                                  245                      250                      255  
 Leu Asp Pro Ala Gly Arg Cys Leu Leu Pro Arg Pro Lys Ser Leu Ala  
                                  260                      265                      270  
 Gly Ser Cys Pro Ser Thr Arg Leu Leu Thr Leu Glu Glu Ala Gln Ala  
                                  275                      280                      285  
 Arg Thr Gln Gly Arg Leu Gly Thr Pro Thr Glu Pro Thr Thr Pro Lys  
                                  290                      295                      300  
 Ala Pro Ala Ser Pro Ala Glu Arg Arg Lys Gly Glu Arg Gly Glu Lys  
 305                                   310                      315                      320  
 Gln Arg Lys Pro Gly Gly Ser Ser Trp Lys Thr Phe Phe Ala Leu Gly  
                                  325                      330                      335  
 Arg Gly Pro Ser Val Pro Arg Lys Lys Pro Leu Pro Trp Leu Gly Gly  
                                  340                      345                      350  
 Thr Arg Ala Pro Pro Gln Pro Ser Ala Trp Leu Asp Asp Gly Asp Glu  
                                  355                      360                      365  
 Leu Asp Phe Ser Pro Pro Arg Cys Leu Glu Gly Leu Arg Gly Leu Asp  
                                  370                      375                      380  
 Phe Asp Pro Leu Thr Phe Arg Cys Ser Ser Pro Thr Pro Gly Asp Pro  
 385                                   390                      395                      400  
 Ala Pro Pro Ala Ser Pro Ala Pro Pro Ala Pro Ala Ser Ala Phe Pro  
                                  405                      410                      415  
 Pro Arg Val Thr Pro Gln Ala Ile Ser Pro Arg Gly Pro Thr Ser Pro  
                                  420                      425                      430  
 Ala Ser Pro Ala Ala Leu Asp Ile Ser Glu Pro Leu Ala Val Ser Val  
                                  435                      440                      445  
 Pro Pro Ala Val Leu Glu Leu Leu Gly Ala Gly Gly Ala Pro Ala Ser  
                                  450                      455                      460  
 Ala Thr Pro Thr Pro Ala Leu Ser Pro Gly Arg Ser Leu Arg Pro His  
 465                                   470                      475                      480  
 Leu Ile Pro Leu Leu Leu Arg Gly Ala Glu Ala Pro Leu Thr Asp Ala  
                                  485                      490                      495  
 Cys Gln Gln Glu Met Cys Ser Lys Leu Arg Gly Ala Gln Gly Pro Leu  
                                  500                      505                      510  
 Ala Arg Leu Met Ala Leu Ala Leu Ala Glu Arg Ala Gln Gln Val Ala  
                                  515                      520                      525  
 Glu Gln Gln Ser Gln Gln Glu Cys Gly Gly Thr Pro Pro Ala Ser Gln  
                                  530                      535                      540  
 Ser Pro Phe His Arg Ser Leu Ser Leu Glu Val Gly Gly Glu Pro Leu  
 545                                   550                      555                      560  
 Gly Thr Ser Gly Ser Gly Pro Pro Pro Asn Ser Leu Ala His Pro Gly  
                                  565                      570                      575  
 Ala Trp Val Pro Gly Pro Pro Pro Tyr Leu Pro Arg Gln Gln Ser Asp  
                                  580                      585                      590  
 Gly Ser Leu Arg Ser Gln Arg Pro Met Gly Thr Ser Arg Arg Gly  
                                  595                      600                      605  
 Leu Arg Gly Pro Ala Gln Val Ser Ala Gln Leu Arg Ala Gly Gly Gly  
                                  610                      615                      620  
 Gly Arg Asp Ala Pro Glu Ala Ala Ala Gln Ser Pro Cys Ser Val Pro  
 625                                   630                      635                      640  
 Ser Gln Val Pro Thr Pro Gly Phe Phe Ser Pro Ala Pro Arg Glu Cys  
                                  645                      650                      655  
 Leu Pro Pro Phe Leu Gly Val Pro Lys Pro Gly Leu Tyr Pro Leu Gly

										660				665				670			
Pro	Pro	Ser	Phe	Gln	Pro	Ser	Ser	Pro	Ala	Pro	Val	Trp	Arg	Ser	Ser						
		675				680				685											
Leu	Gly	Pro	Pro	Ala	Pro	Leu	Asp	Arg	Gly	Glu	Asn	Leu	Tyr	Tyr	Glu						
		690				695				700											
Ile	Gly	Ala	Ser	Glu	Gly	Ser	Pro	Tyr	Ser	Gly	Pro	Thr	Arg	Ser	Trp						
705					710				715				720								
Ser	Pro	Phe	Arg	Ser	Met	Pro	Pro	Asp	Arg	Leu	Asn	Ala	Ser	Tyr	Gly						
		725				730				735											
Met	Leu	Gly	Gln	Ser	Pro	Pro	Leu	His	Arg	Ser	Pro	Asp	Phe	Leu	Leu						
		740				745				750											
Ser	Tyr	Pro	Pro	Ala	Pro	Ser	Cys	Phe	Pro	Pro	Asp	His	Leu	Gly	Tyr						
		755				760				765											
Ser	Ala	Pro	Gln	His	Pro	Ala	Arg	Arg	Pro	Thr	Pro	Pro	Glu	Pro	Leu						
		770				775				780											
Tyr	Val	Asn	Leu	Ala	Leu	Gly	Pro	Arg	Gly	Pro	Ser	Pro	Ala	Ser	Ser						
785					790				795				800								
Ser	Ser	Ser	Ser	Pro	Pro	Ala	His	Pro	Arg	Ser	Arg	Ser	Asp	Pro	Gly						
		805				810				815											
Pro	Pro	Val	Pro	Arg	Leu	Pro	Gln	Lys	Gln	Arg	Ala	Pro	Trp	Gly	Pro						
		820				825				830											
Arg	Thr	Pro	His	Arg	Val	Pro	Gly	Pro	Trp	Gly	Pro	Pro	Glu	Pro	Leu						
		835				840				845											
Leu	Leu	Tyr	Arg	Ala	Ala	Pro	Pro	Ala	Tyr	Gly	Arg	Gly	Gly	Glu	Leu						
		850				855				860											
His	Arg	Gly	Ser	Leu	Tyr	Arg	Asn	Gly	Gly	Gln	Arg	Gly	Glu	Gly	Ala						
865					870				875				880								
Gly	Pro	Pro	Pro	Pro	Tyr	Pro	Thr	Pro	Ser	Trp	Ser	Leu	His	Ser	Glu						
		885				890				895											
Gly	Gln	Thr	Arg	Ser	Tyr	Cys															
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<210> 5381
<211> 1576
<212> DNA
<213> Homo sapiens
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120
gccaggacca tctatggcga ccaccagcga tttgtggacg cctacttcaa ggcctaccca
180
ggctattact tcaactggaga cggggccttac cgaactgagg gcggtatta ccagatcaca
240
gggcggatgg atgatgtcat caacatcagt ggccaccggc tggggaccgc agagattgag
300
gacgccatcg ccgaccaccc tgcagtacca gaaagtgtctg tcattggcta cccccacgac
360
atcaaaggag aagctgcctt tgccttcatt gtggtgaaag atagtgcggg tgactcagat
420
gtggtggtgc aggagctcaa gtccatggtg gccaccaaga tcgccaaata tgctgtgcct
480
```

gatgagatcc tgggtggtgaa acgtcttcca aaaaccaggt ctgggaaggt catgcggcgg  
 540  
 ctccctgagga agatcatcac tagtgaggcc caggagctgg gagacactac caccttggag  
 600  
 gacccagca tcatcgcaga gatcctgagt gtctaccaga agtgcaagga caagcaggct  
 660  
 gctgctaagt gagctggcac cttgtggggc tcttgggatg ggcgggcacc caagccctgg  
 720  
 cttgtccttc ccagaaggta cccctgaggt tggcgtcttc ctacgtccca gaagcagccc  
 780  
 ccacccaca catgaccac accgcctca cgtgaagctg ggctgagagc cctttctccc  
 840  
 atccattgga ggtcccagga gtgtcaccca tggagaggct atgcgacatg gctagggctg  
 900  
 gttctgccat ctgagtttgg tttcttgaa tgaaaaggca ttgccatctc cattcctctg  
 960  
 ccctcttgag ccagcacagg aaggtgaggc cctgggatag cgcgcctgct cagataacac  
 1020  
 agagctagtt agctagtagc aaccgtgtt tctccagatc tgtctagata caaaggtcag  
 1080  
 aaatcttatt tttatacttt tatattgttg aagaacagca tgcaacactc acatgtagtg  
 1140  
 tgttgattta cttgaacatg ttctttttaa catgtagtta tgaaaatctc cttttttgcc  
 1200  
 tctactggtg aggaaacatg aggatcagag gccacatttt taattattgt tagtgtattt  
 1260  
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 1320  
 gcctccggca tcttttcttg gtgagtgtt ctctgtgct tggttgtgta taatggagct  
 1380  
 aactcctaag cgggtggggtg aatgtggccg ccttagttct gaagctactc cagttatgtt  
 1440  
 ctgtttcttc aagctgtgat ccagaaagat tttgtgccc cccagatgct tcttgatagg  
 1500  
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 1560  
 ttgtagagc actaac  
 1576

&lt;210&gt; 5382

&lt;211&gt; 223

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5382

Xaa	Met	Ala	Met	Arg	Pro	Phe	Phe	Gly	Ile	Val	Pro	Val	Leu	Met	Asp
1			5					10					15		
Glu	Lys	Gly	Ser	Val	Val	Glu	Gly	Ser	Asn	Val	Ser	Gly	Ala	Leu	Cys
		20					25					30			
Ile	Ser	Gln	Ala	Trp	Pro	Gly	Met	Ala	Arg	Thr	Ile	Tyr	Gly	Asp	His
		35				40					45				
Gln	Arg	Phe	Val	Asp	Ala	Tyr	Phe	Lys	Ala	Tyr	Pro	Gly	Tyr	Tyr	Phe
	50					55				60					
Thr	Gly	Asp	Gly	Ala	Tyr	Arg	Thr	Glu	Gly	Gly	Tyr	Tyr	Gln	Ile	Thr

65		70		75		80									
Gly	Arg	Met	Asp	Asp	Val	Ile	Asn	Ile	Ser	Gly	His	Arg	Leu	Gly	Thr
			85						90					95	
Ala	Glu	Ile	Glu	Asp	Ala	Ile	Ala	Asp	His	Pro	Ala	Val	Pro	Glu	Ser
			100					105					110		
Ala	Val	Ile	Gly	Tyr	Pro	His	Asp	Ile	Lys	Gly	Glu	Ala	Ala	Phe	Ala
		115					120					125			
Phe	Ile	Val	Val	Lys	Asp	Ser	Ala	Gly	Asp	Ser	Asp	Val	Val	Val	Gln
	130					135					140				
Glu	Leu	Lys	Ser	Met	Val	Ala	Thr	Lys	Ile	Ala	Lys	Tyr	Ala	Val	Pro
145					150					155					160
Asp	Glu	Ile	Leu	Val	Lys	Arg	Leu	Pro	Lys	Thr	Arg	Ser	Gly	Lys	
			165					170					175		
Val	Met	Arg	Arg	Leu	Leu	Arg	Lys	Ile	Thr	Ser	Glu	Ala	Gln	Glu	
		180						185				190			
Leu	Gly	Asp	Thr	Thr	Thr	Leu	Glu	Asp	Pro	Ser	Ile	Ile	Ala	Glu	Ile
	195						200					205			
Leu	Ser	Val	Tyr	Gln	Lys	Cys	Lys	Asp	Lys	Gln	Ala	Ala	Ala	Lys	
	210					215					220				

&lt;210&gt; 5383

&lt;211&gt; 2027

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5383

```

gttgcttcc t g t a t c t c t t c t c a a g a c g g c t t c c c t c t a t g t g t c t a t g t c t a t g t g t c c
60
c c c t g t a a g g a c a g c a g t c a t g c t g g a t c a g g g c c c a c c c t c a t c c a c a c a a c c t t g t c t
120
t a a c t c a g t a c a t c t c c a g t g g c c c a t t t c c a a a g a a g g t t g c g t t c t g g g t t c t g g g
180
g g c t g a g a c t c c a g c a t a t g a a t t t g g g g g g g a c a t g a t g g g a c c c a g c g c a g t g g c c t t
240
c t c c t c c g a g c a g c g c c g g g c a g g c c a g g g c a t g a c c c a c a c c t g t t t g t t t c c c t t c a g
300
a t c g t c t c g a c c c a g g a g a a g g a g c t g g t g c a g c c c t t c a g c t c g c t g t t c c c g a a g g t g
360
g a g t a c a t c g c c a g g g c c g g c g c c t g g g c c a t g t t c c t g g a c c g g c c c c a g c a g t g g c t c
420
c a g t c g t c c t c c t c c c c c c g g c c c t g t t c a t c c c g a g c a c a g a g a a t g a g g a g c a g c g g
480
c t a g c c t c t g c c a g a g c t g t c c c c a g g a a t g t c c a g c c g t a t g t g g t g t a c g a g g a g g t c
540
a c c a a c g t c t g g a t c a a t g t t c a t g a c a t c t t c t a t c c c t t c c c c c a a t c a g a g g g a g a g
600
g a c g a g c t c t g c t t t c t c c g c g c c a a t g a a t g c a a g a c c g g c t t c t g c c a t t t g t a c a a a
660
g t c a c c g c c g t t t t a a a a t c c c a g g g c t a c g a t t g g a g t g a g c c c t t c a g c c c g g g g a a
720
g g t g a g c a g a g c c t g a c g a a t g c t a t c t g g g t c a a t g a g g a g a c c a a g c t g g t g t a c t t c
780
c a g g g c a c c a a g g a c a c g c c g c t g g a g c a c a c c t c t a c g t g g t c a g c t a t g a g g c g g c c
840

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ggcgagatcg tacgcctcac cagccccggc ttctcccata gctgctccat gagccagaac  
 900  
 ttcgacatgt tcgtcagcca ctacagcagc gtgagcacgc cgccctgcgt gcacgtctac  
 960  
 aagctgagcg gccccgacga cgacccccctg cacaagcagc cccgcttctg ggctagcatg  
 1020  
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 1080  
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 1140  
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 1200  
 aacacactgg cctccctggg ctacgccgtg gttgtgattg acggcagggg ctccgtgcag  
 1260  
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 1320  
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 1380  
 gccatccatg gctggtccta cgggggcttc ctctcgctca tggggctaata ccacaagccc  
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 1620  
 ggcttccctg acgaaaacgt gcaactttttc cacacaaact tcctcgtctc ccaactgatc  
 1680  
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 1740  
 cccaacgaga gacacagtat tcgctgcccc gagtcggggc agcactatga agtcacgttg  
 1800  
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 1860  
 aagtggctgc agcctccgcg gggaaccagg cgggagggac tgagtggccc gcgggccccca  
 1920  
 gtgaggcact ttgtcccgcc cagcgctggc cagccccgag gagccgctgc cttcaccgcc  
 1980  
 ccgacgcctt ttatcctttt ttaaaccgctc ttgggtttta tgtccgc  
 2027

&lt;210&gt; 5384

&lt;211&gt; 508

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5384

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 Phe Pro Lys Val Glu Tyr Ile Ala Arg Ala Gly Ala Trp Ala Met Phe  
 20 25 30  
 Leu Asp Arg Pro Gln Gln Trp Leu Gln Leu Val Leu Leu Pro Pro Ala  
 35 40 45  
 Leu Phe Ile Pro Ser Thr Glu Asn Glu Glu Gln Arg Leu Ala Ser Ala

50	55	60
Arg Ala Val Pro Arg	Asn Val Gln Pro Tyr	Val Val Tyr Glu Glu Val
65	70	75
Thr Asn Val Trp Ile	Asn Val His Asp Ile Phe Tyr Pro Phe Pro Gln	80
85	90	95
Ser Glu Gly Glu Asp	Glu Leu Cys Phe Leu Arg Ala Asn Glu Cys Lys	
100	105	110
Thr Gly Phe Cys His	Leu Tyr Lys Val Thr Ala Val Leu Lys Ser Gln	
115	120	125
Gly Tyr Asp Trp Ser	Glu Pro Phe Ser Pro Gly Glu Gly Glu Gln Ser	
130	135	140
Leu Thr Asn Ala Ile	Trp Val Asn Glu Glu Thr Lys Leu Val Tyr Phe	
145	150	155
Gln Gly Thr Lys Asp	Thr Pro Leu Glu His His Leu Tyr Val Val Ser	
165	170	175
Tyr Glu Ala Ala Gly	Glu Ile Val Arg Leu Thr Thr Pro Gly Phe Ser	
180	185	190
His Ser Cys Ser Met	Ser Gln Asn Phe Asp Met Phe Val Ser His Tyr	
195	200	205
Ser Ser Val Ser Thr	Pro Pro Cys Val His Val Tyr Lys Leu Ser Gly	
210	215	220
Pro Asp Asp Asp Pro	Leu His Lys Gln Pro Arg Phe Trp Ala Ser Met	
225	230	235
Met Glu Ala Ala Lys	Ile Phe His Phe His Thr Arg Ser Asp Val Arg	
245	250	255
Leu Tyr Gly Met Ile	Tyr Lys Pro His Ala Leu Gln Pro Gly Lys Lys	
260	265	270
His Pro Thr Val Leu	Phe Val Tyr Gly Gly Pro Gln Val Gln Leu Val	
275	280	285
Asn Asn Ser Phe Lys	Gly Ile Lys Tyr Leu Arg Leu Asn Thr Leu Ala	
290	295	300
Ser Leu Gly Tyr Ala	Val Val Val Ile Asp Gly Arg Gly Ser Cys Gln	
305	310	315
Arg Gly Leu Arg Phe	Glu Gly Ala Leu Lys Asn Gln Met Gly Gln Val	
325	330	335
Glu Ile Glu Asp Gln	Val Glu Gly Leu Gln Phe Val Ala Glu Lys Tyr	
340	345	350
Gly Phe Ile Asp Leu	Ser Arg Val Ala Ile His Gly Trp Ser Tyr Gly	
355	360	365
Gly Phe Leu Ser Leu	Met Gly Leu Ile His Lys Pro Gln Val Phe Lys	
370	375	380
Val Ala Ile Ala Gly	Ala Pro Val Thr Val Trp Met Ala Tyr Asp Thr	
385	390	395
Gly Tyr Thr Glu Arg	Tyr Met Asp Val Pro Glu Asn Asn Gln His Gly	
405	410	415
Tyr Glu Ala Gly Ser	Val Ala Leu His Val Glu Lys Leu Pro Asn Glu	
420	425	430
Pro Asn Arg Leu Leu	Ile Leu His Gly Phe Leu Asp Glu Asn Val His	
435	440	445
Phe Phe His Thr Asn	Phe Leu Val Ser Gln Leu Ile Arg Ala Gly Lys	
450	455	460
Pro Tyr Gln Leu Gln	Val Ala Leu Pro Pro Val Ser Pro Gln Ile Tyr	
465	470	475
Pro Asn Glu Arg His	Ser Ile Arg Cys Pro Glu Ser Gly Glu His Tyr	

485
490  
 Glu Val Thr Leu Leu His Phe Leu Gln Glu Tyr Leu  
500
505

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<210> 5385
<211> 314
<212> DNA
<213> Homo sapiens
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120
cctccccggg ccagccgct gggcagaggg ctgcatgctg gctggctggc caggctgggg
180
cagcctggcc tcctcggccc ctacgtgca cccaccttcc acttcctgga gatgcacca
240
catctccagg aaaattgttt cagaaaatgc ctacaacaca gcagagagtg gaacaaacag
300
ggtcccaacg catg
314
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<210> 5386
<211> 100
<212> PRT
<213> Homo sapiens
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<400> 5386
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Thr Trp Ser Ile Cys Cys Ser Trp Asn Arg Lys Glu Arg Ser Lys Lys
              20              25              30
Ser Val Pro Ser Pro Pro Arg Ala Gln Pro Leu Gly Arg Gly Leu His
              35              40              45
Ala Gly Trp Leu Ala Arg Leu Gly Gln Pro Gly Leu Leu Gly Pro Tyr
              50              55              60
Ala Ala Pro Thr Phe His Phe Leu Glu Met His Pro His Leu Gln Glu
65              70              75              80
Asn Cys Phe Arg Lys Cys Leu Gln His Ser Arg Glu Trp Asn Lys Gln
              85              90              95
Gly Pro Asn Ala
              100

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<210> 5387
<211> 375
<212> DNA
<213> Homo sapiens
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60
accgccacgc accagtcacat gggcaactgg tccatgttca cctggtgctt ctgcttctcc
120
```



atgaccctga tcatectcat cgtggagctg tgcgggctcc aggcccgctt cccctgtct  
 180  
 tggcgcaact tccccatcac cttcgctgc tatgcggccc tcttctgcct ctcggcctcc  
 240  
 atcatctacc ccaccaccta tgtccagttc ctgtcccacg gccgttcgcg ggaccacgcc  
 300  
 atcgccgcca ccttcttctc ctgcatcgcg tgtgtggctt acgccaccga aatggcctgg  
 360  
 acccgggccc gggcc  
 375

<210> 5388

<211> 125

<212> PRT

<213> Homo sapiens

<400> 5388

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Phe	Thr	Trp	Cys	Phe	Cys	Phe	Ser	Met	Thr	Leu	Ile	Ile	Leu	Ile	Val
		35					40					45			
Glu	Leu	Cys	Gly	Leu	Gln	Ala	Arg	Phe	Pro	Leu	Ser	Trp	Arg	Asn	Phe
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Pro	Ile	Thr	Phe	Ala	Cys	Tyr	Ala	Ala	Leu	Phe	Cys	Leu	Ser	Ala	Ser
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Ile	Ile	Tyr	Pro	Thr	Thr	Tyr	Val	Gln	Phe	Leu	Ser	His	Gly	Arg	Ser
			85					90					95		
Arg	Asp	His	Ala	Ile	Ala	Ala	Thr	Phe	Phe	Ser	Cys	Ile	Ala	Cys	Val
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<210> 5389

<211> 1711

<212> DNA

<213> Homo sapiens

<400> 5389

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&lt;210&gt; 5390

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5390

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Val	Thr	Phe	Asp	Gly	Leu	His	Ile	Ser	Leu	Cys	Asp	Leu	Lys	Lys	Gln

	20		25		30
Ile Met Gly Arg Glu Lys Leu Lys Ala Ala Asp Cys Asp Leu Gln Ile					
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Thr Asn Ala Gln Thr Lys Glu Glu Tyr Thr Asp Asp Asn Ala Leu Ile					
	50		55		60
Pro Lys Asn Ser Ser Val Ile Val Arg Arg Ile Pro Ile Gly Gly Val					
65		70		75	80
Lys Ser Thr Ser Lys Thr Tyr Val Ile Ser Arg Thr Glu Pro Ala Met					
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 <211> 797  
 <212> DNA  
 <213> Homo sapiens

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 <213> Homo sapiens

&lt;400&gt; 5392

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&lt;210&gt; 5393

&lt;211&gt; 4837

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5393

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&lt;210&gt; 5394

&lt;211&gt; 354

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5394

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Phe	Tyr	Arg	Leu	Leu	Arg	His	Pro	Ser	Asp	Arg	Met	Gly	Phe	Pro	Pro
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Met	Ala	Arg	Gln	Asp	Asp	Glu	Lys	Arg	Arg	Gln	Glu	Leu	Glu	Glu	Lys
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Ile	Arg	Arg	Lys	Glu	Glu	Glu	Glu	Ala	Lys	Thr	Val	Ser	Ala	Ala	Ala
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Ala	Glu	Lys	Glu	Pro	Val	Pro	Val	Pro	Val	Gln	Glu	Ile	Glu	Ile	Asp
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Pro	Gly	Pro	Val	Lys	Glu	Met	Ala	His	Gly	Ser	Gln	Glu	Ala	Glu	Ala
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<210> 5395

<211> 3711

<212> DNA

<213> Homo sapiens

<400> 5395

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&lt;210&gt; 5396

&lt;211&gt; 760

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5396

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Leu	Glu	Met	Glu	Asn	Glu	Asn	Leu	Val	Glu	Asn	Gly	Ala	Asp	Ser	Asp	
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Ser	Leu	Asn	Trp	Ser	Ser	Phe	Val	Asp	Asn	Thr	Phe	Ala	Glu	Glu	Phe	
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Thr	Thr	Gln	Asn	Gln	Lys	Ser	Gln	Asp	Val	Glu	Leu	Trp	Glu	Gly	Glu	
725				730				735								
Val	Val	Lys	Glu	Leu	Ser	Val	Glu	Glu	Gln	Ile	Lys	Arg	Asn	Arg	Tyr	
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<211> 561
<212> DNA
<213> Homo sapiens
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<211> 154

<212> PRT

<213> Homo sapiens

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Thr	Ser	Ile	Pro	Ile	Ser	Pro	Pro	Leu	Thr	Pro	Gln	Asp	Ala	Asn	Glu
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Arg	Val	Ser	Leu	Gly	Leu	Pro	Arg	Trp	Leu	Cys	Pro	Pro	Phe	Cys	Leu
65					70					75					80
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				85					90					95	
Gly	Leu	Ala	Asp	Ser	Gly	Pro	Pro	Cys	Glu	Leu	Arg	Phe	Glu	Glu	Glu
			100					105					110		
Ser	Arg	Pro	Pro	Arg	Val	Val	Gly	Glu	Ser	Thr	Gly	Arg	Lys	Ala	Gly
		115					120					125			
Ile	Ser	Thr	Glu	Gly	Leu	Ser	Ala	Ser	Phe	Asp	Leu	Phe	Gln	Ser	Phe
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<211> 835

<212> DNA

<213> Homo sapiens

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 Pro Gln Gln Ser Ser Pro Tyr Pro Gly Gly Ser Tyr Gly Pro Pro Gly  
 50 55 60  
 Pro Gln Arg Tyr Pro Ile Gly Ile Gln Gly Arg Thr Pro Gly Ala Met  
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 Ala Gly Met Gln Tyr Pro Gln Gln Gln Met Pro Pro Gln Tyr Gly Gln  
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 Gln Gly Val Ser Gly Tyr Cys Gln Gln Gly Gln Gln Pro Tyr Tyr Ser  
 100 105 110  
 Gln Gln Pro Gln Pro Pro His Leu Pro Pro Gln Ala Gln Tyr Leu Pro  
 115 120 125  
 Ser Gln Ser Gln Gln Arg Tyr Gln Pro Gln Gln Asp Met Ser Gln Glu  
 130 135 140  
 Gly Tyr Gly Thr Arg Ser Gln Pro Pro Leu Ala Pro Gly Lys Pro Asn  
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 <212> DNA  
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&lt;210&gt; 5402

&lt;211&gt; 507

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5402

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Pro	Arg	His	Val	Ala	Asp	Met	Val	Ile	Ser	Glu	Ser	Met	Asp	Ile	Leu
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Leu	Ile	Gly	Ile	Thr	Ser	Lys	Ile	Leu	Phe	Val	Ser	Gln	Gly	Ser	Glu				
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Ile	Ala	Ser	Gln	Gly	Arg	Glu	Leu	Ala	Asn	His	Phe	Gln	Ser	Glu	Gly				
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Thr	Pro	Val	Met	Ile	Gly	Gly	Gly	Val	Leu	Ala	His	Thr	Ile	Leu	Gly				
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Pro	His	Tyr	Thr	Gly	Ala	Glu	Asp	Leu	Gln	Val	Ile	Leu	Glu	Lys	Gly				
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Trp	Cys	Gly	Trp	Lys	Gly	Pro	Asp	Phe	Trp	Asn	Lys	Asp	Ala	Tyr	Tyr				
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<210> 5403

<211> 451

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5403

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&lt;210&gt; 5404

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5404

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			20					25					30		
Ser	Pro	Ala	Leu	Thr	Met	Ala	Pro	Ser	Ser	Leu	Gly	Ala	Leu	Gly	Pro
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	50					55					60				
Pro	Gly	Thr	His	Ala	Gly	Ala	Xaa	Asp	Pro	Arg	Pro	Ser	Leu	Arg	Lys
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Ala	Ser	Leu	Arg	Ala	Ala	Ser	Pro	Ala	Ala	Ser	Ser	Ser	Pro	Trp	Ala
				85				90						95	
Arg	Val	Pro	Cys	Ser	Arg	Ala	Arg	Arg	Pro	Lys	Ser	Ala	Glu	Leu	Leu
			100					105					110		
Arg	Ile	Pro	Gly	Thr	Ser	Thr	Arg	Pro	Lys	Lys	Glu	Arg	Gly	Cys	Pro
		115					120					125			
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&lt;210&gt; 5405

&lt;211&gt; 1609

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5405

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 <212> PRT  
 <213> Homo sapiens

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 Lys Tyr Cys Ser Ala Lys Ala Arg His Ser Trp Thr Lys Asp Arg Arg  
 50 55 60  
 Ala Met Arg Val Met Ser Ile Glu Arg Lys Lys Trp Met Asn Ile Arg  
 65 70 75 80  
 Pro Leu Pro Thr Lys Lys Gln Met Pro Leu Gln Phe Asp Leu Cys Asn  
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 His Ile Ala Ser Gly Lys Lys Cys Gln Tyr Val Gly Asn Cys Ser Phe  
 100 105 110  
 Ala His Ser Pro Glu Glu Arg Glu Val Trp Thr Tyr Met Lys Glu Asn  
 115 120 125  
 Gly Ile Gln Asp Met Glu Gln Phe Tyr Glu Leu Trp Leu Lys Ser Gln  
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 Gly Lys Gln Ile His Met Pro Thr Asp Tyr Ala Glu Val Thr Val Asp  
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 Phe His Cys Trp Met Cys Gly Lys Asn Cys Asn Ser Glu Lys Gln Trp  
 180 185 190  
 Gln Gly His Ile Ser Ser Glu Lys His Lys Glu Lys Val Phe His Thr  
 195 200 205  
 Glu Asp Asp Gln Tyr Cys Trp Gln His Arg Phe Pro Thr Gly Tyr Phe  
 210 215 220  
 Ser Ile Cys Asp Arg Tyr Met Asn Gly Thr Cys Pro Glu Gly Asn Ser  
 225 230 235 240  
 Cys Lys Phe Ala His Gly Asn Ala Glu Leu His Glu Trp Glu Glu Arg  
 245 250 255  
 Arg Asp Ala Leu Lys Met Lys Leu Asn Lys Ala Arg Lys Asp His Leu  
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 <211> 2010  
 <212> DNA  
 <213> Homo sapiens

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<210> 5408
<211> 335
<212> PRT
<213> Homo sapiens
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			20					25					30				
Lys	Glu	Met	Val	Leu	Ser	Glu	Lys	Val	Ser	Gln	Leu	Met	Glu	Trp	Thr		
		35					40					45					
Asn	Lys	Arg	Pro	Val	Ile	Arg	Met	Asn	Gly	Asp	Lys	Phe	Arg	Arg	Leu		
	50					55					60						
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65					70					75					80		
Leu	Gln	Leu	His	Arg	Gln	Cys	Val	Val	Cys	Lys	Gln	Ala	Asp	Glu	Glu		
			85						90					95			
Phe	Gln	Ile	Leu	Ala	Asn	Ser	Trp	Arg	Tyr	Ser	Ser	Ala	Phe	Thr	Asn		
			100					105					110				
Arg	Ile	Phe	Phe	Ala	Met	Val	Asp	Phe	Asp	Glu	Gly	Ser	Asp	Val	Phe		
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Gln	Met	Leu	Asn	Met	Asn	Ser	Ala	Pro	Thr	Phe	Ile	Asn	Phe	Pro	Ala		
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Ile	His	Gly	Ser	Ser	Gln	Ala	Gln	Phe	Val	Ala	Glu	Thr	His	Ile	Val		
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Ala	Gly Ile Gly Leu Val Val Leu Phe Phe Ser Trp Met Leu Ser Ile					
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&lt;210&gt; 5409

&lt;211&gt; 2019

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5409

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<211> 198

<212> PRT

<213> Homo sapiens

<400> 5410

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Ser	Ser	Phe	Ser	Asp	Arg	Lys	Phe	Ser	Val	Thr	Ser	Arg	Gly	Ser	Ile



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    165                                      170                                      175  
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<210> 5411

<211> 2802

<212> DNA

<213> Homo sapiens

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 <212> PRT  
 <213> Homo sapiens

<400> 5412

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Met Ile Gly Asn Ile Phe Thr Gln Gln Pro Ser Tyr Tyr Ser Asp Leu
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Asp Glu Thr Leu Pro Thr Ile Leu Gln Val Phe Ser Asn Ile Leu Gln
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His Cys Gly Leu Gln Gly Asp Gly Ala Asn Thr Thr Pro Gln Lys Leu
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Glu Ser Ala Ile Lys Lys Arg Arg Leu Glu Asp Ser Lys Leu Leu Gly
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Asp Leu Trp Gln Arg Leu Ser His Ser Arg Lys Lys Leu Met Glu Ile
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Phe His Ile Ile Leu Asn Gln Ile Cys Leu Leu Pro Ile Leu Glu Ser
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Ser Cys Asp Asn Ile Gln Gly Phe Ile Glu Glu Phe Leu Gln Ile Phe
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Glu Ala Val Ser Gln Ala Ser Ser His Pro Glu Asn Ser Glu Glu Glu
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Glu Cys Met Gly Ala Ala Ala Ala Val Gly Pro Ala Met Cys Gly Val
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Glu Leu Asp Ser Leu Ile Ser Gln Val Lys Asp Leu Leu Pro Asp Leu
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Gly Glu Gly Phe Ile Leu Ala Cys Leu Glu Tyr Tyr His Tyr Asp Pro

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 Arg Arg Met Ala Phe Leu Ala Lys Lys Gly Tyr Arg His Asp Ser Ser  
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 Thr Ala Val Ala Gly Ser Pro Arg Gly His Gly Gln Ser Arg Glu Thr  
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 Thr Gln Glu Arg Arg Lys Lys Glu Ala Asn Lys Ala Thr Arg Ala Asn  
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&lt;210&gt; 5413

&lt;211&gt; 1677

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5413

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&lt;210&gt; 5414

&lt;211&gt; 426

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5414

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 Leu Phe Asn Thr Lys Ser Ser Thr Ser Val Gly Gln Leu Gln Ser Pro  
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 Leu Ala Phe Asn Thr Lys Ser Lys Ala Ser Thr Val Gly Ser Glu Leu  
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 Val Leu Val Ser Thr Thr Val Pro Thr Val His His Val Ser Asp Leu  
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 Glu Met Ser Ser Thr Leu Asp Cys Leu Pro Val Leu Ala Asp Trp Glu  
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 145 150 155 160  
 Thr Val Pro Ile Ser Asp Ser Asp Leu Glu Ile Ser Phe Asn Ser Gly  
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 Glu Arg Leu Met Val Leu Lys Glu Leu Glu Met Ser Ser His Glu Asn  
 180 185 190  
 Phe Gly Asp Ile Glu Glu Thr Pro Gln Lys Ser Glu Thr Ser Lys Ser  
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 Lys Asp Pro Gly Ser Asp Ile Ser Ala Phe Lys Leu Pro Glu His Lys  
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 Ser Ser Thr Phe Asn Arg Val Asn Ala Asn Met Ser His Pro Leu Val  
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 Ser Pro Gln Ala Phe Pro Pro Ala Lys Lys Gln Pro Phe Thr Ile His  
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 Ser Met Val Pro Ser His Ser Thr Gly Gly Leu Thr Phe Ser Ser Pro  
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&lt;210&gt; 5415

&lt;211&gt; 1493

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5415

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 <213> Homo sapiens

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<210> 5417  
 <211> 2087  
 <212> DNA  
 <213> Homo sapiens

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 960



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&lt;210&gt; 5418

&lt;211&gt; 528

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5418

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Ala	Pro	Leu	Glu	Lys	Pro	Ile	Val	Leu	Met	Lys	Pro	Arg	Glu	Glu	Gly	
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Gln	Thr	Ser	Gly	Ile	Asp	Phe	Phe	Ile	Thr	Gln	Glu	Arg	Ile	Val	Phe	
			245						250					255		
Leu	Asp	Thr	Gln	Pro	Ile	Leu	Ser	Pro	Ser	Ile	Leu	Asp	His	Leu	Ile	
			260					265					270			
Asn	Asn	Asp	Arg	Lys	Leu	Pro	Pro	Glu	Tyr	Asn	Leu	Pro	His	Thr	Tyr	
	275						280					285				
Val	Glu	Met	Gln	Ser	Leu	Gln	Ile	Ala	Ala	Phe	Leu	Phe	Thr	Val	Cys	
	290					295					300					
His	Val	Val	Ile	Val	Val	Gln	Asp	Trp	Phe	Thr	Asp	Leu	Ser	Leu	Tyr	
305					310					315					320	
Arg	Leu	Trp	Asp	Leu	Gly	Cys	Lys	Cys	Lys	Ser	Asn	Ser	His	Ser	Pro	
			325						330					335		
Gln	Thr	Pro	Arg	Phe	Leu	Gln	Thr	Ala	Glu	Met	Val	Lys	Pro	Ser	Thr	
			340					345					350			
Pro	Ser	Pro	Ser	His	Glu	Ser	Ser	Ser	Ser	Ser	Gly	Ser	Asp	Glu	Gly	
	355					360						365				
Thr	Glu	Tyr	Tyr	Pro	His	Leu	Val	Phe	Leu	Gln	Asn	Lys	Ala	Arg	Arg	
	370					375						380				
Glu	Asp	Phe	Cys	Pro	Arg	Lys	Leu	Arg	Gln	Met	His	Leu	Met	Ile	Asp	
385					390					395					400	
Gln	Leu	Met	Ala	His	Ser	His	Leu	Arg	Tyr	Lys	Gly	Thr	Leu	Ser	Met	
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<210> 5419  
 <211> 989  
 <212> DNA  
 <213> Homo sapiens

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 420  
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 480  
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 660  
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 720  
 gatcagaaaa aaagtccata tggactgtgg atacctatct aaaagaagaa aactgatggc  
 780  
 taagtttgca tgaaaactgc actttattgc aagtttagtgt ttctagcatt atcccatccc  
 840  
 tttgagccat tcaggggtac ttgtgcattt aaaaaccaac aaaaaagat gtaaatactt  
 900  
 aacactcaaa tattaacatt ttaggtttct cttgcagata tgagagatag cacagatgga  
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<210> 5420  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<400> 5420  
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35							40					45				
Thr	Arg	Arg	Tyr	Tyr	Arg	Ser	Pro	Ser	Arg	Tyr	Arg	Ser	Arg	Ser	Arg	
50							55					60				
Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Ser	Tyr	Cys	Gly	Arg	Ala	Tyr	Ala	
65	70							75					80			
Ile	Ala	Arg	Gly	Gln	Arg	Tyr	Tyr	Gly	Phe	Gly	Arg	Thr	Val	Tyr	Pro	
85							90					95				
Glu	Glu	His	Ser	Arg	Trp	Arg	Asp	Arg	Ser	Arg	Thr	Arg	Ser	Arg	Ser	
100							105					110				
Arg	Thr	Pro	Phe	Arg	Leu	Ser	Glu	Lys	Asp	Arg	Met	Glu	Leu	Leu	Glu	
115							120					125				
Ile	Ala	Lys	Thr	Asn	Ala	Ala	Lys	Ala	Leu	Gly	Thr	Thr	Asn	Ile	Asp	
130							135					140				
Leu	Pro	Ala	Ser	Leu	Arg	Thr	Val	Pro	Ser	Ala	Lys	Glu	Thr	Ser	Arg	
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<212> DNA
<213> Homo sapiens
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<400> 5421

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cgggaccacg ccatcgccgc caccttcttc tctgcatcg cgtgtgtggc ttacgccacc
600
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780
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<210> 5422

<211> 276

<212> PRT

<213> Homo sapiens

<400> 5422

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			20					25					30		
Thr	Gln	Pro	Leu	Gly	Leu	Leu	Arg	Leu	Leu	Gln	Leu	Val	Ser	Thr	Cys
			35				40					45			
Val	Ala	Phe	Ser	Leu	Val	Ala	Ser	Val	Gly	Ala	Trp	Thr	Gly	Ser	Met
		50				55					60				
Gly	Asn	Trp	Ser	Met	Phe	Thr	Trp	Cys	Phe	Cys	Phe	Ser	Val	Thr	Leu
65					70					75					80
Ile	Ile	Leu	Ile	Val	Glu	Leu	Cys	Gly	Leu	Gln	Ala	Arg	Phe	Pro	Leu
				85					90					95	
Ser	Trp	Arg	Asn	Phe	Pro	Ile	Thr	Phe	Ala	Cys	Tyr	Ala	Ala	Leu	Phe
			100					105					110		
Cys	Leu	Ser	Ala	Ser	Ile	Ile	Tyr	Pro	Thr	Thr	Tyr	Val	Gln	Phe	Leu
			115				120					125			
Ser	His	Gly	Arg	Ser	Arg	Asp	His	Ala	Ile	Ala	Ala	Thr	Phe	Phe	Ser
			130			135					140				
Cys	Ile	Ala	Cys	Val	Ala	Tyr	Ala	Thr	Glu	Val	Ala	Trp	Thr	Arg	Ala
145					150					155					160
Arg	Pro	Gly	Glu	Ile	Thr	Gly	Tyr	Met	Ala	Thr	Val	Pro	Gly	Leu	Leu
				165					170					175	
Lys	Val	Leu	Glu	Thr	Phe	Val	Ala	Cys	Ile	Ile	Phe	Ala	Phe	Ile	Ser
			180				185					190			
Asp	Pro	Asn	Leu	Tyr	Gln	His	Gln	Pro	Ala	Leu	Glu	Trp	Cys	Val	Ala
		195				200						205			
Val	Tyr	Ala	Ile	Cys	Phe	Ile	Leu	Ala	Ala	Ile	Ala	Ile	Leu	Leu	Asn
		210				215					220				
Leu	Gly	Glu	Cys	Thr	Asn	Val	Leu	Pro	Ile	Pro	Phe	Pro	Ser	Phe	Leu
225					230					235					240
Ser	Gly	Leu	Ala	Leu	Cys	Leu	Ser	Ser	Ser	Met	Pro	Pro	Pro	Leu	Phe
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Ser	Gly	Pro	Ser	Thr	Ser	Ser	Met	Arg	Ser	Met	Ala	Ala	Ser	Leu	Gly

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<210> 5423  
 <211> 2427  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 300  
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 420  
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 1320

gccctgaccc aaaggccaga ttacattaag gctgtggtga aaaaagcaga actacttagc  
 1380  
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 2340  
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<210> 5424

<211> 570

<212> PRT

<213> Homo sapiens

<400> 5424

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				20				25					30		
Lys	Tyr	Gln	Leu	Leu	Val	Tyr	His	Ala	Asp	Ser	Leu	Phe	His	Asp	Lys
		35					40					45			
Glu	Tyr	Arg	Asn	Ala	Val	Ser	Lys	Tyr	Thr	Met	Ala	Leu	Gln	Gln	Lys
	50						55				60				
Lys	Ala	Leu	Ser	Lys	Thr	Ser	Lys	Val	Arg	Pro	Ser	Thr	Gly	Asn	Ser

65					70					75				80
Ala	Ser	Thr	Pro	Gln	Ser	Gln	Cys	Leu	Pro	Ser	Glu	Ile	Glu	Val Lys
				85					90					95
Tyr	Lys	Met	Ala	Glu	Cys	Tyr	Thr	Met	Leu	Lys	Gln	Asp	Lys	Asp Ala
			100					105					110	
Ile	Ala	Ile	Leu	Asp	Gly	Ile	Pro	Ser	Arg	Gln	Arg	Thr	Pro	Lys Ile
		115					120					125		
Asn	Met	Met	Leu	Ala	Asn	Leu	Tyr	Lys	Lys	Ala	Gly	Gln	Glu	Arg Pro
	130					135					140			
Ser	Val	Thr	Ser	Tyr	Lys	Glu	Val	Leu	Arg	Gln	Cys	Pro	Leu	Ala Leu
145					150					155				160
Asp	Ala	Ile	Leu	Gly	Leu	Leu	Ser	Leu	Ser	Val	Lys	Gly	Ala	Glu Val
			165					170						175
Ala	Ser	Met	Thr	Met	Asn	Val	Ile	Gln	Thr	Val	Pro	Asn	Leu	Asp Trp
		180						185					190	
Leu	Ser	Val	Trp	Ile	Lys	Ala	Tyr	Ala	Phe	Val	His	Thr	Gly	Asp Asn
	195						200					205		
Ser	Arg	Ala	Ile	Ser	Thr	Ile	Cys	Ser	Leu	Glu	Lys	Lys	Ser	Leu Leu
	210					215					220			
Arg	Asp	Asn	Val	Asp	Leu	Leu	Gly	Ser	Leu	Ala	Asp	Leu	Tyr	Phe Arg
225					230					235				240
Ala	Gly	Asp	Asn	Lys	Asn	Ser	Val	Leu	Lys	Phe	Glu	Gln	Ala	Gln Met
			245						250					255
Leu	Asp	Pro	Tyr	Leu	Ile	Lys	Gly	Met	Asp	Val	Tyr	Gly	Tyr	Leu Leu
		260					265					270		
Ala	Arg	Glu	Gly	Arg	Leu	Glu	Asp	Val	Glu	Asn	Leu	Gly	Cys	Arg Leu
	275					280						285		
Phe	Asn	Ile	Ser	Asp	Gln	His	Ala	Glu	Pro	Trp	Val	Val	Ser	Gly Cys
	290					295					300			
His	Ser	Phe	Tyr	Ser	Lys	Arg	Tyr	Ser	Arg	Ala	Leu	Tyr	Leu	Gly Ala
305					310					315				320
Lys	Ala	Ile	Gln	Leu	Asn	Ser	Asn	Ser	Val	Gln	Ala	Leu	Leu	Leu Lys
			325						330					335
Gly	Ala	Ala	Leu	Arg	Asn	Met	Gly	Arg	Val	Gln	Glu	Ala	Ile	Ile His
		340					345						350	
Phe	Arg	Glu	Ala	Ile	Arg	Leu	Ala	Pro	Cys	Arg	Leu	Asp	Cys	Tyr Glu
	355					360						365		
Gly	Leu	Ile	Glu	Cys	Tyr	Leu	Ala	Ser	Asn	Ser	Ile	Arg	Glu	Ala Met
	370					375					380			
Val	Met	Ala	Asn	Asn	Val	Tyr	Lys	Thr	Leu	Gly	Ala	Asn	Ala	Gln Thr
385					390					395				400
Leu	Thr	Leu	Leu	Ala	Thr	Val	Cys	Leu	Glu	Asp	Pro	Val	Thr	Gln Glu
			405						410					415
Lys	Ala	Lys	Thr	Leu	Leu	Asp	Lys	Ala	Leu	Thr	Gln	Arg	Pro	Asp Tyr
		420						425				430		
Ile	Lys	Ala	Val	Val	Lys	Lys	Ala	Glu	Leu	Leu	Ser	Arg	Glu	Gln Lys
	435						440					445		
Tyr	Glu	Asp	Gly	Ile	Ala	Leu	Leu	Arg	Asn	Ala	Leu	Ala	Asn	Gln Ser
	450					455					460			
Asp	Cys	Val	Leu	His	Arg	Ile	Leu	Gly	Asp	Phe	Leu	Val	Ala	Val Asn
465					470					475				480
Glu	Tyr	Gln	Glu	Ala	Met	Asp	Gln	Tyr	Ser	Ile	Ala	Leu	Ser	Leu Asp
			485					490						495
Pro	Asn	Asp	Gln	Lys	Ser	Leu	Glu	Gly	Met	Gln	Lys	Met	Glu	Lys Glu



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Glu Ser Pro Thr Asp Ala Thr Gln Glu Glu Asp Val Asp Asp Met Glu					
	515		520		525
Gly Ser Gly Glu Glu Gly Asp Leu Glu Gly Ser Asp Ser Glu Ala Ala					
	530		535		540
Gln Trp Ala Asp Gln Glu Gln Trp Phe Gly Met Ser Glu Gly Ala Ala					
545		550		555	560
Ala Pro Trp Pro Gln Trp Pro Ala Leu Leu					
	565		570		

<210> 5425  
 <211> 639  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 300  
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 639

<210> 5426  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 5426  
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 Pro Ser Cys Ala Pro Ala Leu Leu Gly Ser Gly Cys Gly Ser Gly Glu  
 20 25 30  
 Ser Cys Asp Arg Gly Cys Leu Ala Ala Ile Leu Ala Ser Thr Ser Ala  
 35 40 45  
 Thr Gln Ala Arg Met Cys Pro Val Leu Arg Cys Cys Ser Glu Phe Ile  
 50 55 60  
 Glu Ala Xaa Gly Val Val Asp Gly Ile Tyr Arg Leu Ser Gly Val Ser

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Ser Asn Ile Gln Arg Leu Arg His Glu Phe Asp Ser Glu Arg Ile Pro
              85              90              95
Glu Leu

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<210> 5427
<211> 366
<212> DNA
<213> Homo sapiens
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<400> 5427
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tgaggataca tcagagggca aaatggatac agatactctg aaaaaacgtg cattctagct
180
gggattgggt cctccacact gtgtccaaaa ggtatgttgg ggttgctgaa gtagataaac
240
tggtattggc agcaggaaca gcatttatgg aacagagggg aagacacatt caaggaatga
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360
gttgaa
366
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<210> 5428
<211> 101
<212> PRT
<213> Homo sapiens
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<400> 5428
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Ser Cys Cys Gln Tyr Gln Phe Ile Tyr Phe Ser Asn Pro Asn Ile Pro
          20          25          30
Phe Gly His Ser Val Glu Asp Pro Ile Pro Ala Arg Met His Val Phe
          35          40          45
Ser Glu Tyr Leu Tyr Pro Phe Cys Pro Leu Met Tyr Pro Gln His Leu
          50          55          60
Glu Glu His Leu Ala Cys Ser Arg Tyr Ser Thr Arg Ile Phe Asp Leu
65          70          75          80
Phe Val Gly Leu Phe Met Thr Glu Ser Cys Ser Val Ala Gln Thr Gly
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Val Gln Tyr Ser Asp
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<210> 5429
<211> 612
<212> DNA
<213> Homo sapiens
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<400> 5429

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<210> 5430

<211> 94

<212> PRT

<213> Homo sapiens

<400> 5430

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Val	Lys	Gln	Glu	Arg	Gly	Glu	Gly	Pro	Arg	Ala	Gly	Glu	Lys	Gly	Ser
		20					25					30			
His	Glu	Glu	Glu	Val	Arg	Val	Pro	Ala	Leu	Ser	Trp	Gly	Arg	Pro	Arg
		35				40					45				
Ala	Pro	Ala	Pro	Ala	Ser	Lys	Pro	Arg	Pro	Arg	Leu	Asp	Leu	Asn	Cys
	50				55					60					
Leu	Trp	Leu	Arg	Pro	Gln	Pro	Ile	Phe	Leu	Trp	Lys	Leu	Arg	Pro	Arg
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<210> 5431

<211> 3005

<212> DNA

<213> Homo sapiens

<400> 5431

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&lt;210&gt; 5432

&lt;211&gt; 863

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5432

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Glu	Tyr	Leu	Leu	Arg	His	Leu	Ala	Arg	Met	Ala	Arg	His	Ser	Ala	Asn
				20				25					30		
Thr	Ser	Met	His	Ala	Arg	Asn	Leu	Ala	Ile	Val	Trp	Ala	Pro	Asn	Leu

[illegible]

465				470				475				480			
Ala	Glu	Arg	Ala	Gln	Gln	Val	Ala	Glu	Gln	Gln	Ser	Gln	Gln	Glu	Cys
				485				490				495			
Gly	Gly	Thr	Pro	Pro	Ala	Ser	Gln	Ser	Pro	Phe	His	Arg	Ser	Leu	Ser
			500					505				510			
Leu	Glu	Val	Gly	Gly	Glu	Pro	Leu	Gly	Thr	Ser	Gly	Ser	Gly	Pro	Pro
		515					520				525				
Pro	Asn	Ser	Leu	Ala	His	Pro	Gly	Ala	Trp	Val	Pro	Gly	Pro	Pro	Pro
	530					535				540					
Tyr	Leu	Pro	Arg	Gln	Gln	Ser	Asp	Gly	Ser	Leu	Leu	Arg	Ser	Gln	Arg
545				550				555				560			
Pro	Met	Gly	Thr	Ser	Arg	Arg	Gly	Leu	Arg	Gly	Pro	Ala	Gln	Val	Ser
			565				570				575				
Ala	Gln	Leu	Arg	Ala	Gly	Gly	Gly	Gly	Arg	Asp	Ala	Pro	Glu	Ala	Ala
		580					585				590				
Ala	Gln	Ser	Pro	Cys	Ser	Val	Pro	Ser	Gln	Val	Pro	Thr	Pro	Gly	Phe
	595			600							605				
Phe	Ser	Pro	Ala	Pro	Arg	Glu	Cys	Leu	Pro	Pro	Phe	Leu	Gly	Val	Pro
610				615				620							
Lys	Pro	Gly	Leu	Tyr	Pro	Leu	Gly	Pro	Pro	Ser	Phe	Gln	Pro	Ser	Ser
625				630				635							
Pro	Ala	Pro	Val	Trp	Arg	Ser	Ser	Leu	Gly	Pro	Pro	Ala	Pro	Leu	Asp
			645					650				655			
Arg	Gly	Glu	Asn	Leu	Tyr	Tyr	Glu	Ile	Gly	Ala	Ser	Glu	Gly	Ser	Pro
		660					665					670			
Tyr	Ser	Gly	Pro	Thr	Arg	Ser	Trp	Ser	Pro	Phe	Arg	Ser	Met	Pro	Pro
	675			680							685				
Asp	Arg	Leu	Asn	Ala	Ser	Tyr	Gly	Met	Leu	Gly	Gln	Ser	Pro	Pro	Leu
690				695				700							
His	Arg	Ser	Pro	Asp	Phe	Leu	Leu	Ser	Tyr	Pro	Pro	Ala	Pro	Ser	Cys
705				710				715							
Phe	Pro	Pro	Asp	His	Leu	Gly	Tyr	Ser	Ala	Pro	Gln	His	Pro	Ala	Arg
			725					730						735	
Arg	Pro	Thr	Pro	Pro	Glu	Pro	Leu	Tyr	Val	Asn	Leu	Ala	Leu	Gly	Pro
		740					745					750			
Arg	Gly	Pro	Ser	Pro	Ala	Ser	Ser	Ser	Ser	Ser	Ser	Pro	Pro	Ala	His
	755					760					765				
Pro	Arg	Ser	Arg	Ser	Asp	Pro	Gly	Pro	Pro	Val	Pro	Arg	Leu	Pro	Gln
	770					775					780				
Lys	Gln	Arg	Ala	Pro	Trp	Gly	Pro	Arg	Thr	Pro	His	Arg	Val	Pro	Gly
785				790				795						800	
Pro	Trp	Gly	Pro	Pro	Glu	Pro	Leu	Leu	Leu	Tyr	Arg	Ala	Ala	Pro	Pro
			805					810						815	
Ala	Tyr	Gly	Arg	Gly	Gly	Glu	Leu	His	Arg	Gly	Ser	Leu	Tyr	Arg	Asn
		820						825				830			
Gly	Gly	Gln	Arg	Gly	Glu	Gly	Ala	Gly	Pro	Pro	Pro	Pro	Tyr	Pro	Thr
	835						840				845				
Pro	Ser	Trp	Ser	Leu	His	Ser	Glu	Gly	Gln	Thr	Arg	Ser	Tyr	Cys	
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&lt;210&gt; 5433

&lt;211&gt; 385

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5433

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385

&lt;210&gt; 5434

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5434

Asp	Leu	Thr	Asn	Leu	His	Tyr	Ser	Thr	Pro	Leu	Pro	Ala	Ser	Leu	Asp
1				5					10					15	
Thr	Thr	Asp	His	His	Phe	Gly	Ser	Met	Ser	Val	Gly	Asn	Ser	Val	Asn
			20					25					30		
Asn	Ile	Pro	Ala	Ala	Met	Thr	His	Leu	Gly	Ile	Arg	Ser	Ser	Ser	Gly
		35					40					45			
Leu	Gln	Ser	Ser	Arg	Ser	Asn	Pro	Ser	Ile	Gln	Ala	Thr	Leu	Asn	Lys
	50					55				60					
Thr	Val	Leu	Ser	Ser	Ser	Leu	Asn	Asn	His	Pro	Gln	Thr	Ser	Val	Pro
65					70					75				80	
Asn	Ala	Ser	Ala	Leu	His	Pro	Ser	Leu	Arg	Leu	Phe	Ser	Leu	Ser	Asn
			85					90					95		
Pro	Ser	Leu	Ser	Thr	Thr	Asn	Leu	Ser	Gly	Pro	Ser	Arg	Arg	Arg	Gln
			100				105					110			
Pro	Pro	Val	Ser	Pro	Leu	Thr	Leu	Ser	Pro	Gly	Pro	Glu	Ala	His	Gln
		115					120					125			

&lt;210&gt; 5435

&lt;211&gt; 617

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5435

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120  
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180  
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240



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<210> 5436

<211> 119

<212> PRT

<213> Homo sapiens

<400> 5436

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His	Pro	Leu	Ile	Ala	Arg	Ala	Lys	Gly	Lys	Thr	Met	Ala	Ser	Ser	Asp
			20					25					30		
Gly	Thr	Ile	Arg	Ala	Asn	Leu	Tyr	Phe	Lys	Ile	Leu	Gln	Pro	Lys	Met
		35					40					45			
Lys	Asn	Asn	His	Ile	Arg	Ser	Cys	Arg	Ala	Val	Leu	His	Arg	Ser	Asp
	50					55					60				
Leu	Leu	Val	Arg	Lys	Leu	Leu	Ala	Leu	Cys	Lys	Glu	Lys	Glu	Asp	Cys
65					70					75				80	
Asn	Arg	Asn	His	Glu	Pro	Gly	Arg	Glu	Met	Gly	Leu	Glu	Lys	Gly	Glu
			85						90					95	
Glu	Asn	Trp	Met	Ser	Asp	Ile	Ser	Glu	Thr	Gln	Asp	Pro	Phe	Leu	Gln
			100					105						110	
Tyr	Tyr	Ser	Thr	Ile	Val	Met									
			115												

<210> 5437

<211> 1422

<212> DNA

<213> Homo sapiens

<400> 5437

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<210> 5438

<211> 245

<212> PRT

<213> Homo sapiens

<400> 5438

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Gly	Ser	Asn	His	Ala	Leu	Gly	Ala	Asn	Val	Glu	Leu	Trp	Ile	Met	Leu
			20					25					30		
Leu	Gln	Val	Val	Arg	Glu	Gly	Lys	Phe	Ser	Gly	Phe	Leu	Thr	Ser	Cys
		35				40					45				
Ser	Leu	Leu	Leu	Pro	Arg	Ala	Ala	Gln	Ile	Leu	Ala	Ala	Glu	Ala	Gly
	50				55					60					
Leu	Pro	Ser	Ser	Arg	Ser	Phe	Met	Gly	Phe	Ala	Ala	Pro	Phe	Thr	Asn

65		70		75		80
Lys Arg Lys Ala Tyr Ser Glu Arg Arg Ile Met Gly Tyr Ser Met Gln						
	85		90		95	
Glu Met Tyr Glu Val Val Ser Asn Val Gln Glu Tyr Arg Glu Phe Val						
	100		105		110	
Pro Trp Cys Lys Lys Ser Leu Val Val Ser Ser Arg Lys Gly His Leu						
	115		120		125	
Lys Ala Gln Leu Glu Val Gly Phe Pro Pro Val Met Glu Arg Tyr Thr						
	130		135		140	
Ser Ala Val Ser Met Val Lys Pro His Met Val Lys Ala Val Cys Thr						
145		150		155		160
Asp Gly Lys Leu Phe Asn His Leu Glu Thr Ile Trp Arg Phe Ser Pro						
	165		170		175	
Gly Ile Pro Ala Tyr Pro Arg Thr Cys Thr Val Asp Phe Ser Ile Ser						
	180		185		190	
Phe Glu Phe Arg Ser Leu Leu His Ser Gln Leu Ala Thr Met Phe Phe						
	195		200		205	
Asp Glu Val Val Lys Gln Asn Val Ala Ala Phe Glu Arg Arg Ala Ala						
	210		215		220	
Thr Lys Phe Gly Pro Glu Thr Ala Ile Pro Arg Glu Leu Met Phe His						
225		230		235		240
Glu Val His Gln Thr						
	245					

&lt;210&gt; 5439

&lt;211&gt; 4234

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5439

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720

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<210> 5440

<211> 461

<212> PRT

<213> Homo sapiens

<400> 5440

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			20					25					30		
Gln	Arg	Met	Leu	Asn	Arg	Arg	Pro	Glu	Ile	Val	Val	Ala	Thr	Pro	Gly
		35					40					45			
Arg	Leu	Trp	Glu	Leu	Ile	Lys	Glu	Lys	His	Tyr	His	Leu	Arg	Asn	Leu
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Arg	Gln	Leu	Arg	Cys	Leu	Val	Val	Asp	Glu	Ala	Asp	Arg	Met	Val	Glu
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Lys	Gly	His	Phe	Ala	Glu	Leu	Ser	Gln	Leu	Leu	Glu	Met	Leu	Asn	Asp
			85					90						95	
Ser	Gln	Tyr	Asn	Pro	Lys	Arg	Gln	Thr	Leu	Val	Phe	Ser	Ala	Thr	Leu
			100					105						110	
Thr	Leu	Val	His	Gln	Ala	Pro	Ala	Arg	Ile	Leu	His	Lys	Lys	His	Thr
			115					120						125	
Lys	Lys	Met	Asp	Lys	Thr	Ala	Lys	Leu	Asp	Leu	Leu	Met	Gln	Lys	Ile
		130				135						140			
Gly	Met	Arg	Gly	Lys	Pro	Lys	Val	Ile	Asp	Leu	Thr	Arg	Asn	Glu	Ala
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Thr	Val	Glu	Thr	Leu	Thr	Glu	Thr	Lys	Ile	His	Cys	Glu	Thr	Asp	Glu
			165					170						175	
Lys	Asp	Phe	Tyr	Leu	Tyr	Tyr	Phe	Leu	Met	Gln	Tyr	Pro	Gly	Arg	Ser
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Leu	Val	Phe	Ala	Asn	Ser	Ile	Ser	Cys	Ile	Lys	Arg	Leu	Ser	Gly	Leu
		195					200						205		
Leu	Lys	Val	Leu	Asp	Ile	Met	Pro	Leu	Thr	Leu	His	Ala	Cys	Met	His
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Gln	Lys	Gln	Arg	Leu	Arg	Asn	Leu	Glu	Gln	Phe	Ala	Arg	Leu	Glu	Asp
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			260					265						270	
Tyr	Val	His	Arg	Ser	Gly	Arg	Thr	Ala	Arg	Ala	Thr	Asn	Glu	Gly	Leu
		275					280						285		
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305	310	315
Thr Lys Tyr Met Asp Val Val Lys Glu Arg Ile Arg Leu Ala Arg Gln		
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	355	360
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	370	375
Lys Gln Met Lys Val Leu Lys Lys Glu Leu Arg His Leu Leu Ser Gln		
385	390	395
Pro Leu Phe Thr Glu Ser Gln Lys Thr Lys Tyr Pro Thr Gln Ser Gly		
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&lt;210&gt; 5441

&lt;211&gt; 1635

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5441

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&lt;210&gt; 5442

&lt;211&gt; 250

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5442

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		20						25					30		
Lys	Asn	Lys	Val	Val	Gly	Trp	Arg	Ser	Gly	Val	Glu	Lys	Asp	Leu	Asp
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Val	Ala	Lys	Lys	Glu	Asp	Leu	Ile	Ser	Ala	Phe	Gly	Thr	Asp	Asp	Gln
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Thr	Glu	Ile	Cys	Lys	Gln	Ile	Leu	Thr	Lys	Gly	Glu	Val	Gln	Val	Ser
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			100						105				110		
Thr	Ile	Val	Ala	Asp	Lys	Cys	Val	Asn	Pro	Glu	Thr	Lys	Arg	Pro	Tyr
		115					120						125		
Thr	Val	Ile	Leu	Ile	Glu	Arg	Ala	Met	Lys	Asp	Ile	His	Tyr	Ser	Val



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Ile Leu Pro Val Asn Glu Gly Lys Lys Leu Lys Glu Lys Leu Lys Pro		175
	180	185
Leu Ile Lys Val Ile Glu Ser Glu Asp Tyr Gly Gln Gln Leu Glu Ile		190
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Val Cys Leu Ile Asp Pro Gly Cys Phe Arg Glu Ile Asp Glu Leu Ile		205
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Asp Val Glu Glu Gly Asp Glu Lys Phe Glu		240
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&lt;210&gt; 5443

&lt;211&gt; 2021

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5443

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 2021

&lt;210&gt; 5444

&lt;211&gt; 438

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5444

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			20					25					30		
Lys	Ile	Arg	Leu	Arg	Cys	Gln	Lys	Gly	Ile	Pro	Pro	Ser	Leu	Arg	Gly
			35					40					45		
Arg	Ala	Trp	Gln	Tyr	Leu	Ser	Gly	Gly	Lys	Val	Lys	Leu	Gln	Gln	Asn
			50					55				60			
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Gln	Ala	Pro	Ile	Ala	Ala	Val	Leu	Leu	Met	His	Met	Pro	Ala	Glu	Gln	
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Ala	Phe	Trp	Cys	Leu	Val	Gln	Ile	Cys	Glu	Lys	Tyr	Leu	Pro	Gly	Tyr	
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Ser	Leu	Leu	Gln	Lys	Val	Ser	Pro	Val	Ala	His	Lys	His	Leu	Ser	Arg	
180				185				190								
Gln	Lys	Ile	Asp	Pro	Leu	Leu	Tyr	Met	Thr	Glu	Trp	Phe	Met	Cys	Ala	
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Phe	Ser	Arg	Thr	Leu	Pro	Trp	Ser	Ser	Val	Leu	Arg	Val	Trp	Asp	Met	
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Met	Val	Val	Ala	Ala	Ala	Gly	Asp	Ala	Cys	Pro	Pro	Gln	His	Val	Pro	
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Pro	Lys	Asp	Ser	Ala	Pro	Lys	Asp	Ser	Ala	Pro	Gln	Asp	Leu	Ala	Pro	
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Gln	Val	Ser	Ala	His	His	Arg	Ser	Gln	Glu	Ser	Leu	Thr	Ser	Gln	Glu	
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<210> 5445

<211> 1187

<212> DNA

<213> Homo sapiens

<400> 5445

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<210> 5446

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5446

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			20					25				30			
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			35				40				45				
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&lt;210&gt; 5447

&lt;211&gt; 1444

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5447

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 <212> PRT  
 <213> Homo sapiens

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 Val Thr Asp Val Phe Gln Gly Ser Met Arg Ile Phe Thr Lys Lys Leu  
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 Pro His Pro Asp Leu Pro Ala Glu Glu Lys Glu Gln Leu Leu His Asn  
 65 70 75 80  
 Asp Glu Tyr Gln Glu Thr Met Val Glu Ser Thr Phe Met Tyr Leu Thr  
 85 90 95  
 Leu Asp Leu Pro Thr Ala Pro Leu Tyr Lys Asp Glu Lys Glu Gln Leu  
 100 105 110  
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 115 120 125  
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 130 135 140  
 Phe Gln Leu Thr Lys Leu Pro Pro Tyr Leu Ile Phe Cys Ile Lys Arg  
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 <212> DNA  
 <213> Homo sapiens

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<210> 5450

<211> 293

<212> PRT

<213> Homo sapiens

<400> 5450

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Glu	Met	Lys	Glu	Arg	Gly	Gly	Asn	Gln	Thr	Ser	Gly	Ile	Asp	Phe	Phe
			20					25					30		
Ile	Thr	Gln	Glu	Arg	Ile	Val	Phe	Leu	Asp	Thr	Gln	Pro	Ile	Leu	Ser
			35				40					45			
Pro	Ser	Ile	Leu	Asp	His	Leu	Ile	Asn	Asn	Asp	Arg	Lys	Leu	Pro	Pro
	50					55					60				
Glu	Tyr	Asn	Leu	Pro	His	Thr	Tyr	Val	Glu	Met	Gln	Ser	Leu	Gln	Ile

65					70					75					80
Ala	Ala	Phe	Leu	Phe	Thr	Val	Cys	His	Val	Gly	Ile	Xaa	Val	Gln	Asp
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Trp	Phe	Thr	Asp	Leu	Ser	Leu	Tyr	Arg	Phe	Leu	Gln	Thr	Ala	Glu	Met
			100					105					110		
Val	Lys	Pro	Ser	Thr	Pro	Ser	Pro	Ser	His	Glu	Ser	Ser	Ser	Ser	Ser
		115					120					125			
Gly	Ser	Asp	Glu	Gly	Thr	Glu	Tyr	Tyr	Pro	His	Leu	Val	Phe	Phe	Gln
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Asn	Lys	Ala	Arg	Arg	Glu	Asp	Phe	Cys	Pro	Arg	Lys	Leu	Arg	Gln	Met
145					150					155				160	
His	Leu	Met	Ile	Asp	Gln	Leu	Met	Ala	His	Ser	His	Leu	Arg	Tyr	Lys
			165					170						175	
Gly	Thr	Leu	Ser	Met	Leu	Gln	Cys	Asn	Val	Phe	Pro	Gly	Leu	Pro	Pro
		180						185					190		
Asp	Phe	Leu	Asp	Ser	Glu	Val	Asn	Leu	Phe	Leu	Val	Pro	Phe	Met	Asp
	195						200					205			
Ser	Glu	Ala	Glu	Ser	Glu	Asn	Pro	Pro	Arg	Ala	Gly	Pro	Gly	Ser	Ser
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Pro	Leu	Phe	Ser	Leu	Leu	Pro	Gly	Tyr	Arg	Gly	His	Pro	Ser	Phe	Gln
225					230					235				240	
Ser	Leu	Val	Ser	Lys	Leu	Arg	Ser	Gln	Val	Met	Ser	Met	Ala	Arg	Pro
			245					250					255		
Gln	Leu	Ser	His	Thr	Ile	Leu	Thr	Glu	Lys	Asn	Trp	Phe	His	Tyr	Ala
		260						265				270			
Ala	Arg	Ile	Trp	Asp	Gly	Val	Arg	Lys	Ser	Ser	Ala	Leu	Ala	Glu	Tyr
	275					280						285			
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&lt;210&gt; 5451

&lt;211&gt; 1184

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5451

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180

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300

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&lt;210&gt; 5452

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5452

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			20					25					30		
Ser	Ser	Pro	Glu	Leu	Ser	Val	Ala	Phe	His	His	Ser	Gly	Pro	Ser	Cys
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Leu	Ser	Pro	Ala	Leu	Ser	Gln	Thr	Thr	Gln	Lys	Ser	Gly	His	Leu	Trp
		50				55					60				
Ala	Pro	Gly	Met	Val	Thr	Glu	Glu	Lys	His	Ala	Val	Pro	Val	Ser	Pro
65					70				75					80	
Gly	Phe	Cys	Gln	Lys	Ile	Glu	Gln	Val	Gln	Leu	Thr	His	Cys	Tyr	Cys
			85					90						95	
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		100					105						110		
Gln	Val	Arg	His	Leu	Glu	Pro	Pro	Gly	Glu	Gly	Pro	Pro	Ser	Arg	Ala
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Leu	Lys	Glu	Leu	His	Glu	Ile	Arg	Asn	Cys	Leu	Met	Lys	Cys	Ile	Ser
		130				135					140				
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Leu	Gly	Glu	Val	Gly	Ala	Gly	Thr	Ile	Ser	Val	Pro	Ser	Thr	Leu	Thr
		180					185						190		
Pro	Ser	Thr	Ser	Glu	Thr	Thr	Leu	Pro	Gln	Pro	Asp	Thr	Glu		

195

200

205

&lt;210&gt; 5453

&lt;211&gt; 1974

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5453

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<210> 5454

<211> 320

<212> PRT

<213> Homo sapiens

<400> 5454

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			20				25						30		
Arg	Ile	Asp	Ser	Lys	Ala	Trp	Arg	Glu	Thr	Leu	Thr	Leu	Gln	Lys	Gln
			35				40					45			
Leu	Arg	Tyr	Arg	Phe	Pro	Glu	Leu	Ala	Asp	Pro	Asp	Thr	Cys	Tyr	Gly
			50				55				60				
Phe	Arg	Phe	Cys	His	Gln	Leu	Asp	Phe	Ser	Thr	Ser	Gly	Ala	Leu	Cys
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Val	Ala	Leu	Asn	Lys	Ala	Ala	Ala	Gly	Ser	Ala	Tyr	Arg	Cys	Phe	Lys
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			115				120					125			
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			130				135				140				
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Leu	Thr	Gly	Arg	Thr	His	Gln	Leu	Arg	Val	His	Cys	Ser	Ala	Leu	Gly
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His	Pro	Val	Val	Gly	Asp	Leu	Thr	Tyr	Gly	Glu	Val	Ser	Gly	Arg	Glu
			195				200					205			
Asp	Arg	Pro	Phe	Arg	Met	Met	Leu	His	Ala	Phe	Tyr	Leu	Arg	Ile	Pro

210		215		220	
Thr Asp Thr Glu Cys Val Glu Val Cys Thr Pro Asp Pro Phe Leu Pro					
225		230		235	240
Ser Leu Asp Ala Cys Trp Ser Pro His Thr Leu Leu Gln Ser Leu Asp					
	245		250		255
Gln Leu Val Gln Ala Leu Arg Ala Thr Pro Asp Pro Asp Pro Glu Asp					
	260		265		270
Arg Gly Pro Arg Pro Gly Ser Pro Ser Ala Leu Leu Pro Gly Pro Gly					
	275		280		285
Arg Pro Pro Pro Pro Pro Thr Lys Pro Pro Glu Thr Glu Ala Gln Arg					
	290		295		300
Gly Pro Cys Leu Gln Trp Leu Ser Glu Trp Thr Leu Glu Pro Asp Ser					
305		310		315	320

&lt;210&gt; 5455

&lt;211&gt; 975

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5455

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240
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accatgaaca tccccttcca gtccatccac ttcacacct atgagttcct gcaggagcag
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<210> 5456  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

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 20 25 30  
 Leu Tyr Gly Leu Ala Ser Phe Arg Pro Gly Val Gly Pro His Pro Thr  
 35 40 45  
 His Cys Pro Leu Ala Val Arg Leu Ala Cys Pro Ala Val Pro Thr Thr  
 50 55 60  
 Val Val Lys Gln Arg Leu Gln Met Tyr Asn Ser Gln His Arg Ser Ala  
 65 70 75 80  
 Ile Ser Cys Ile Arg Thr Val Trp Arg Thr Glu Gly Leu Gly Ala Phe  
 85 90 95  
 Tyr Arg Ser Tyr Thr Thr Gln Leu Thr Met Asn Ile Pro Phe Gln Ser  
 100 105 110  
 Ile His Phe Ile Thr Tyr Glu Phe Leu Gln Glu Gln Val Asn Pro His  
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 Arg Thr Tyr Asn Pro Gln Ser His Ile Ile Ser Gly Gly Leu Ala Gly  
 130 135 140  
 Ala Leu Ala Ala Ala  
 145

<210> 5457  
 <211> 448  
 <212> DNA  
 <213> Homo sapiens

<400> 5457  
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 tccgtgtcca cccacatgac agcaggagcg atggccggga tcctggagca ctcggtcatg  
 180  
 taccgggtgg actcggtgaa ggtaatgtgg actgtggagc tctgtgctgg tcactttcaa  
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 300  
 tcccattata atattaaatt tgcttcttcg tgaggtcaca cctcacatcc ccagtgtcac  
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<210> 5458  
 <211> 81  
 <212> PRT

<213> Homo sapiens

<400> 5458

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Arg Ser Gly Ser Val Gly Ser Gln Ala Val Ala Arg Arg Met Asp Gly
 1           5           10          15
Asp Ser Arg Asp Gly Gly Gly Gly Lys Asp Ala Thr Gly Ser Glu Asp
          20          25          30
Tyr Glu Asn Leu Pro Thr Ser Ala Ser Val Ser Thr His Met Thr Ala
          35          40          45
Gly Ala Met Ala Gly Ile Leu Glu His Ser Val Met Tyr Pro Val Asp
          50          55          60
Ser Val Lys Val Met Trp Thr Val Glu Leu Cys Ala Gly His Phe Gln
65          70          75          80
Pro

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<210> 5459

<211> 1468

<212> DNA

<213> Homo sapiens

<400> 5459

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120
cggatggagc tgcgcagcgg gagcgtgggc agccaggcgg tggcgcgag gatggatggg
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gacagccgag atggcggcgg cggcaaggac gccaccgggt cggaggacta cgagaacctg
240
ccgactagcg cctcctgtgc caccacatg acagcaggag cgatggccgg gatcctggag
300
cactcgggtc tgtacccggt ggactcgggt aagacacgaa tgcagagttt gagtccagat
360
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420
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480
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540
ggaaacagcc acctagccaa cggatatttg aaagcgtttg tctggagtta gaaagttctc
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660
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720
cacgcacaca cgcgcgcgcg cacacacatg cttttttctg ttccctccg ctttctgaag
780
cctggggaga aatcagtgac agagggtgtt tggttttatt gttatgtggg ttttctttg
840
tatttttttt gtttgttttg tttttaaaca ttcaaaagca attaatgatc agacatagga
900
gaaaccctga atagaaacaa aacttttgaa tgctggattc aaaaaaaaaa aaaagttatc
960

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 1020  
 ctaactaagc tttaaaagggt caagaagttt tatggctgac aaaggactcg cgcaacgcag  
 1080  
 aaggcctttc ccaccttaag cttccgggga tctgggaatt ttacccccat tctcttctgt  
 1140  
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 gagtatggcc accctgctcc acgatgcggt aatgaatcca gcagaaggta atgtttcatg  
 1260  
 gtcccagggg ggggcagtag gggatgtgca aaggggcaca aaaaaatggt tgtgggagag  
 1320  
 tggagaggac tgaagggtggg cagacggctc ctagtctcca gtcagagcag acaggagaat  
 1380  
 tgaatttttt actacgtt caaaggcctc aagaaaggac gtgaacataa gagtttttgg  
 1440  
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<210> 5460  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

<400> 5460  
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 20 25 30  
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 35 40 45  
 Met Thr Ala Gly Ala Met Ala Gly Ile Leu Glu His Ser Val Met Tyr  
 50 55 60  
 Pro Val Asp Ser Val Lys Thr Arg Met Gln Ser Leu Ser Pro Asp Pro  
 65 70 75 80  
 Lys Ala Gln Tyr Thr Ser Ile Tyr Gly Ala Leu Lys Lys Ile Met Gln  
 85 90 95  
 Thr Glu Gly Phe Trp Arg Pro Leu Arg Gly Val Asn Val Met Ile Met  
 100 105 110  
 Gly Ala Gly Pro Ala His Ala Met Tyr Phe Ala Cys Tyr Glu Asn Met  
 115 120 125  
 Lys Arg Thr Leu Asn Asp Val Phe His His Gln Gly Asn Ser His Leu  
 130 135 140  
 Ala Asn Gly Ile Leu Lys Ala Phe Val Trp Ser  
 145 150 155

<210> 5461  
 <211> 1725  
 <212> DNA  
 <213> Homo sapiens

<400> 5461  
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180  
atatggagcg aaatatcttc ctgaatatgc agagaaaatt cctgggtgaat ccacacagaa  
240  
gctttctgaa gtagcaaagg aatgcagcat atatctcatt ggaggtaact tcctacccac  
300  
aaggctctat ccctgaagag gatgctggga aattatataa cacctgtgct gtgtttgggc  
360  
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420  
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960  
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gacatgcgtt ttgcagagct tgcacaaatc tacgcacaga gaggctgcca gctgttggtg  
1080  
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1320  
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<210> 5462  
<211> 159  
<212> PRT  
<213> Homo sapiens

<400> 5462  
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20 25 30  
Leu Gly Ile Cys Tyr Asp Met Arg Phe Ala Glu Leu Ala Gln Ile Tyr  
35 40 45  
Ala Gln Arg Gly Cys Gln Leu Leu Val Tyr Pro Gly Ala Phe Asn Leu  
50 55 60  
Thr Thr Gly Pro Ala His Trp Glu Leu Leu Gln Arg Ser Arg Ala Val  
65 70 75 80  
Asp Asn Gln Val Tyr Val Ala Thr Ala Ser Pro Ala Arg Asp Asp Lys  
85 90 95  
Ala Ser Tyr Val Ala Trp Gly His Ser Thr Val Val Asn Pro Trp Gly  
100 105 110  
Glu Val Leu Ala Lys Ala Gly Thr Glu Glu Ala Ile Val Tyr Ser Asp  
115 120 125  
Ile Asp Leu Lys Lys Leu Ala Glu Ile Arg Gln Gln Ile Pro Val Phe  
130 135 140  
Arg Gln Lys Arg Ser Asp Leu Tyr Ala Val Glu Met Lys Lys Pro  
145 150 155

<210> 5463  
<211> 792  
<212> DNA  
<213> Homo sapiens

<400> 5463  
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120  
gacaaaggcg agggacaaga gagagttaac atctagacag tggaaaaagc catggtgtgt  
180  
ggtttctggg aaccaccaac acttgcaggt ttagcttttt cccaggggtg actacaagaa  
240  
agaaaacat gtttttgcaa gattaaaatg tggttgagtg tgcctaaatt aaccatcccc  
300  
atttttatca tttttccacc atcacttcag ggttttaaga gtcagtgtc acctgggagg  
360  
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420  
tccaggaact tcttgagaac acccgatcgc agagggtaat tttctggagt ttgttttgca  
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540

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<210> 5464

<211> 111

<212> PRT

<213> Homo sapiens

<400> 5464

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			20				25					30			
Gln	Met	Tyr	Asn	Ser	Gln	His	Arg	Ser	Ala	Ile	Ser	Cys	Ile	Arg	Thr
		35				40					45				
Val	Trp	Arg	Thr	Glu	Gly	Leu	Gly	Ala	Phe	Tyr	Arg	Ser	Tyr	Thr	Thr
	50					55				60					
Gln	Leu	Thr	Met	Asn	Ile	Pro	Phe	Gln	Ser	Ile	His	Phe	Ile	Thr	Tyr
65					70				75					80	
Glu	Phe	Leu	Gln	Glu	Gln	Val	Asn	Pro	His	Arg	Thr	Tyr	Asn	Pro	Gln
			85				90					95			
Ser	His	Ile	Ile	Ser	Gly	Gly	Leu	Ala	Gly	Ala	Leu	Ala	Ala	Ala	
			100				105					110			

<210> 5465

<211> 497

<212> DNA

<213> Homo sapiens

<400> 5465

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497

<210> 5466  
<211> 134  
<212> PRT  
<213> Homo sapiens

<400> 5466  
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Asp Gly Gln Ala Ala Trp Val Ala Gly Pro Arg Lys Ala Gly Val Asp  
20 25 30  
Val Arg Asp Glu Pro Pro Ala Lys Pro Val Gly Met Ser Gly Pro Ser  
35 40 45  
Trp Trp Asp Cys Leu Gly His Arg His Gln His Gly Val Arg Ala Ile  
50 55 60  
Ser Gly Asp Ile Gly Gly Ala Thr Thr Arg Trp Gly Ile Phe Asn Arg  
65 70 75 80  
Leu Glu Pro Leu Arg Leu Glu Arg Pro Thr Pro Gly Arg Arg Pro Pro  
85 90 95  
Leu Thr Pro Leu Leu Pro Leu Leu Trp Asp Pro Pro Val Asp Thr Pro  
100 105 110  
Asp Glu Asp Thr Gln Glu Ala Ser Ser Gln Asp Arg Arg Gln Leu Pro  
115 120 125  
Gly Gln Pro Arg Ser Ala  
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<210> 5467  
<211> 1329  
<212> DNA  
<213> Homo sapiens

<400> 5467  
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&lt;210&gt; 5468

&lt;211&gt; 363

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5468

Met	Asp	Ala	Val	Leu	Glu	Pro	Phe	Pro	Ala	Asp	Arg	Leu	Phe	Pro	Gly
1				5					10					15	
Ser	Ser	Phe	Leu	Asp	Leu	Gly	Asp	Leu	Asn	Glu	Ser	Asp	Phe	Leu	Asn
			20					25					30		
Asn	Ala	His	Phe	Pro	Glu	His	Leu	Asp	His	Phe	Thr	Glu	Asn	Met	Glu
		35					40					45			
Asp	Phe	Ser	Asn	Asp	Leu	Phe	Ser	Ser	Phe	Phe	Asp	Asp	Pro	Val	Leu
	50				55						60				
Asp	Glu	Lys	Ser	Pro	Leu	Leu	Asp	Met	Glu	Leu	Asp	Ser	Pro	Thr	Pro
65				70					75					80	
Gly	Ile	Gln	Ala	Glu	His	Ser	Tyr	Ser	Leu	Ser	Gly	Asp	Ser	Ala	Pro
			85					90					95		
Gln	Ser	Pro	Leu	Val	Pro	Ile	Lys	Met	Glu	Asp	Thr	Thr	Gln	Asp	Ala
		100					105						110		
Glu	His	Gly	Ala	Trp	Ala	Leu	Gly	His	Lys	Leu	Cys	Ser	Ile	Met	Val
	115					120					125				
Lys	Gln	Glu	Gln	Ser	Pro	Glu	Leu	Pro	Val	Asp	Pro	Leu	Ala	Ala	Pro
	130					135				140					
Ser	Ala	Met	Ala	Ala	Ala	Ala	Ala	Met	Ala	Thr	Thr	Pro	Leu	Leu	Gly
145				150					155					160	
Leu	Ser	Pro	Leu	Ser	Arg	Leu	Pro	Ile	Pro	His	Gln	Ala	Pro	Gly	Glu

				165					170					175	
Met	Thr	Gln	Leu	Pro	Val	Ile	Lys	Ala	Glu	Pro	Leu	Glu	Val	Asn	Gln
			180					185					190		
Phe	Leu	Lys	Val	Thr	Pro	Glu	Asp	Leu	Val	Gln	Met	Pro	Pro	Thr	Pro
		195					200					205			
Pro	Ser	Ser	His	Gly	Ser	Asp	Ser	Asp	Gly	Ser	Gln	Ser	Pro	Arg	Ser
	210					215					220				
Leu	Pro	Pro	Ser	Ser	Pro	Val	Arg	Pro	Met	Ala	Arg	Ser	Ser	Thr	Ala
225					230					235					240
Ile	Ser	Ser	Ser	Pro	Leu	Leu	Thr	Ala	Pro	His	Lys	Leu	Gln	Gly	Thr
			245						250					255	
Ser	Gly	Pro	Leu	Val	Leu	Thr	Glu	Glu	Glu	Lys	Arg	Thr	Leu	Ile	Ala
		260					265						270		
Glu	Gly	Tyr	Pro	Ile	Pro	Thr	Lys	Leu	Pro	Leu	Thr	Lys	Ser	Glu	Glu
	275						280					285			
Lys	Ala	Leu	Lys	Lys	Ile	Arg	Arg	Lys	Ile	Lys	Asn	Lys	Ile	Ser	Ala
	290					295					300				
Gln	Glu	Ser	Arg	Arg	Lys	Lys	Lys	Glu	Tyr	Met	Asp	Ser	Leu	Glu	Lys
305					310					315					320
Lys	Val	Glu	Ser	Cys	Ser	Thr	Glu	Asn	Leu	Glu	Leu	Arg	Lys	Lys	Val
			325						330					335	
Glu	Thr	Leu	Glu	Asn	Ala	Asn	Ser	Phe	Ser	Ser	Gly	Ile	Gln	Pro	Leu
		340						345					350		
Leu	Cys	Ser	Leu	Ile	Gly	Leu	Glu	Asn	Pro	Thr					
		355					360								

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<210> 5469
<211> 1292
<212> DNA
<213> Homo sapiens
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<400> 5469
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120
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180
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240
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300
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360
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420
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480
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540
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600
ttagagcagg agcaggcccc gagggacgcc ctgaagcagc gggcggaaca gagcatctct
660

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 780  
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 1200  
 aaagactttg acttggacat gactgaagag gaggtgcaga tggcactttc caaagtggat  
 1260  
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 1292

&lt;210&gt; 5470

&lt;211&gt; 427

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5470

Xaa	Ala	Ala	Ala	Ser	Thr	Glu	Gly	Glu	Asp	Val	Gly	Trp	Trp	Arg	Ser
1				5					10					15	
Trp	Leu	Gln	Gln	Ser	Tyr	Gln	Ala	Val	Lys	Glu	Lys	Ser	Ser	Glu	Ala
			20					25					30		
Leu	Glu	Phe	Met	Lys	Arg	Asp	Leu	Thr	Glu	Phe	Thr	Gln	Val	Val	Gln
		35				40						45			
His	Asp	Thr	Ala	Cys	Thr	Ile	Ala	Ala	Thr	Ala	Ser	Val	Val	Lys	Glu
	50					55					60				
Lys	Leu	Ala	Thr	Glu	Gly	Ser	Ser	Gly	Ala	Thr	Glu	Lys	Met	Lys	Lys
65				70					75					80	
Gly	Leu	Ser	Asp	Phe	Leu	Gly	Val	Ile	Ser	Asp	Thr	Phe	Ala	Pro	Ser
			85					90						95	
Pro	Asp	Lys	Thr	Ile	Asp	Cys	Asp	Val	Ile	Thr	Leu	Met	Gly	Thr	Pro
		100						105					110		
Ser	Gly	Thr	Ala	Glu	Pro	Tyr	Asp	Gly	Thr	Lys	Ala	Arg	Leu	Tyr	Ser
		115					120					125			
Leu	Gln	Ser	Asp	Pro	Ala	Thr	Tyr	Cys	Asn	Glu	Pro	Asp	Gly	Pro	Pro
		130				135					140				
Glu	Leu	Phe	Asp	Ala	Trp	Leu	Ser	Gln	Phe	Cys	Leu	Glu	Glu	Lys	Lys
145				150					155					160	
Gly	Glu	Ile	Ser	Glu	Leu	Leu	Val	Gly	Ser	Pro	Ser	Ile	Arg	Ala	Leu
			165					170					175		
Tyr	Thr	Lys	Met	Val	Pro	Ala	Ala	Val	Ser	His	Ser	Glu	Phe	Trp	His
		180						185					190		
Arg	Tyr	Phe	Tyr	Lys	Val	His	Gln	Leu	Glu	Gln	Glu	Gln	Ala	Arg	Arg

195	200	205
Asp Ala Leu Lys Gln Arg	Ala Glu Gln Ser Ile Ser	Glu Glu Pro Gly
210	215	220
Trp Glu Glu Glu Glu Glu	Glu Leu Met Gly Ile Ser	Pro Ile Ser Pro
225	230	235
Lys Glu Ala Lys Val Pro	Val Ala Lys Ile Ser Thr	Phe Pro Glu Gly
245	250	255
Glu Pro Gly Pro Gln Ser	Pro Cys Glu Glu Asn Leu	Val Thr Ser Val
260	265	270
Glu Pro Pro Ala Glu Val	Thr Pro Ser Glu Ser Ser	Glu Ser Ile Ser
275	280	285
Leu Val Thr Gln Ile Ala	Asn Pro Ala Thr Ala Pro	Glu Ala Arg Val
290	295	300
Leu Pro Lys Asp Leu Ser	Gln Lys Leu Leu Glu Ala	Ser Leu Glu Glu
305	310	315
Gln Gly Leu Ala Val Asp	Val Gly Glu Thr Gly Pro	Ser Pro Pro Ile
325	330	335
His Ser Lys Pro Leu Thr	Pro Ala Gly His Thr Gly	Gly Pro Glu Pro
340	345	350
Arg Pro Pro Ala Arg Val	Glu Thr Leu Arg Glu Glu	Ala Pro Thr Asp
355	360	365
Leu Arg Val Phe Glu Leu	Asn Ser Asp Ser Gly Lys	Ser Thr Pro Ser
370	375	380
Asn Asn Gly Lys Lys Gly	Ser Ser Thr Asp Ile Ser	Glu Asp Trp Glu
385	390	395
Lys Asp Phe Asp Leu Asp	Met Thr Glu Glu Glu Val	Gln Met Ala Leu
405	410	415
Ser Lys Val Asp Ala Ser	Gly Glu Leu Lys Met	
420	425	

<210> 5471  
 <211> 534  
 <212> DNA  
 <213> Homo sapiens

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 ctggccccac tacgcggggc ccagagccag ggtgggggat gcagagaccg ggcgtgcggg  
 120  
 ttgccagggtg tggcgacat gtgtgccctg ggcagagta cagagacaca agcttggtg  
 180  
 gacacgaatg tgtagctatg tgcgagtga cacggagtgg tgagtgcagg gacccaggc  
 240  
 cggcctgcgt cgggtgcgcag ggcataatagg ggcgtgcacg cagtcttgga ggtgtgtgca  
 300  
 cagagcccc ggcacccgcg tgtgtgcaaa gacacaggaa cccgtctgcg tggcgctgtg  
 360  
 tgtgcaaccc aaggagggtg gcgcttgga tccaaagtgt gcgcttatcc ggatgtggat  
 420  
 gtgggggagc ccgggggacg ggctgggtgt gcgtgactcg ggtgtgccg gacccacaga  
 480  
 gcatatgtgt ccatgcctgg tgctgtgact catgtccctg ggggtggcac gcgt  
 534

<210> 5472  
 <211> 161  
 <212> PRT  
 <213> Homo sapiens

<400> 5472  
 Met Leu Cys Gly Ser Arg His Thr Arg Val Thr His Thr Gln Pro Cys  
 1 5 10 15  
 Pro Arg Leu Pro Pro His Pro His Pro Asp Lys Arg Thr Leu Trp Ser  
 20 25 30  
 Pro Ser Ala His Leu Leu Gly Leu His Thr Gln Arg His Ala Asp Gly  
 35 40 45  
 Phe Leu Cys Leu Cys Thr His Ala Gly Ala Gly Gly Ser Val His Thr  
 50 55 60  
 Pro Pro Arg Leu Arg Ala Arg Pro Tyr Met Pro Cys Ala Pro Thr Gln  
 65 70 75 80  
 Ala Gly Leu Gly Ser Leu His Ser Pro Leu Arg Val His Ser His Ile  
 85 90 95  
 Ala Thr His Ser Cys Pro His Lys Leu Val Ser Leu Tyr Ser Ala His  
 100 105 110  
 Gly His Thr Cys Ala Pro His Leu Ala Thr Arg Thr Pro Gly Leu Cys  
 115 120 125  
 Ile Pro His Pro Gly Ser Gly Pro Arg Val Val Gly Pro Ala Gly Ser  
 130 135 140  
 Ala Ala Ala Ser Ala Arg Thr Val Leu Phe Leu Arg Pro Arg Gly Ala  
 145 150 155 160  
 Ala

<210> 5473  
 <211> 691  
 <212> DNA  
 <213> Homo sapiens

<400> 5473  
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 120  
 catcttcttg ggctgcagg agacctgaca gatgccaaaa caaaggaaca gttgggatcc  
 180  
 aggcagcatg aggtagaatg gcaaacctac cagggtattc tgaagaagac aagagtcatg  
 240  
 gaaaaaacca agtggctgga tatcaaagga aatcatgaaa aagatggagg agctcttatt  
 300  
 actggccaag gaaagcagtc ggagcaacca tacaatttgg tttggacact ttacaacatc  
 360  
 cactattctt tctccatcac caggaatccg gtcaataatg agttcggcta tagcttattt  
 420  
 gtgtggacat ctccatacac ttggtggact gatgcctgtt ttgcacactc gtcacttcca  
 480  
 gggcactttg gaacttgagg tgggagactg gaaggataat aggaggtacc ggatttttgc  
 540



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 600  
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 660  
 tcttcactca acccacatta gattggtaac a  
 691

<210> 5474

<211> 139

<212> PRT

<213> Homo sapiens

<400> 5474

Met	Lys	Lys	Met	Glu	Glu	Leu	Leu	Leu	Leu	Ala	Lys	Glu	Ser	Ser	Arg
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Ser	Asn	His	Thr	Ile	Trp	Phe	Gly	His	Phe	Thr	Thr	Ser	Thr	Ile	Leu
			20				25						30		
Ser	Pro	Ser	Pro	Gly	Ile	Arg	Ser	Ile	Met	Ser	Ser	Ala	Ile	Ala	Tyr
		35				40					45				
Leu	Cys	Gly	His	Leu	His	Thr	Leu	Gly	Gly	Leu	Met	Pro	Val	Leu	His
	50				55					60					
Thr	Arg	His	Phe	Gln	Gly	Thr	Leu	Glu	Leu	Glu	Val	Gly	Asp	Trp	Lys
65				70					75					80	
Asp	Asn	Arg	Arg	Tyr	Arg	Ile	Phe	Ala	Phe	Asp	His	Asp	Leu	Phe	Ser
			85					90					95		
Phe	Ala	Asp	Leu	Ile	Phe	Gly	Lys	Trp	Pro	Val	Val	Leu	Ile	Thr	Asn
			100				105					110			
Pro	Lys	Ser	Leu	Leu	Tyr	Ser	Cys	Gly	Glu	His	Glu	Pro	Leu	Glu	Arg
		115				120						125			
Leu	Leu	His	Ser	Thr	His	Ile	Arg	Leu	Val	Thr					
	130					135									

<210> 5475

<211> 628

<212> DNA

<213> Homo sapiens

<400> 5475

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 120  
 aacaaccccc acgccagcta cagcgccctt ccgccagtga gctcctccga cagcgaggcc  
 180  
 cccgaggcca accccgccga cggcagtgac gctgacgagg acgatgagga ccgggggggc  
 240  
 atggccgtca cagcggtaac cgccacagct gccagcgaca ggatggagag cgactcagac  
 300  
 tcagacaaga gtagcgacaa cagtggcctg aagaggaaga cgcctgcgct aaagatgtcg  
 360  
 gtctcgaaac gagcccgaag ggctccagc gacctggatc aggccagcgt gtccccatcc  
 420  
 gaagaggaga actcggaaag ctcatctgag tcggagaaga ccagcgacca ggacttcaca  
 480

cctgagaaga aagcagcggg cccgggcgcca cggagggggcc ctctggggggg acggaaaaaa  
 540  
 aagaaggcgc cgtcagcctc cgactccgac tccaaggccg attcggacgg ggccaagcct  
 600  
 gagccggtgg ccatggcgcg gtcggcgt  
 628

<210> 5476  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 5476  
 Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro Tyr  
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 Asp Lys Cys Lys Asp Lys Tyr Gly Lys Pro Asn Lys Arg Lys Gly Phe  
 20 25 30  
 Asn Glu Gly Leu Trp Glu Ile Gln Asn Asn Pro His Ala Ser Tyr Ser  
 35 40 45  
 Ala Pro Pro Pro Val Ser Ser Ser Asp Ser Glu Ala Pro Glu Ala Asn  
 50 55 60  
 Pro Ala Asp Gly Ser Asp Ala Asp Glu Asp Asp Glu Asp Arg Gly Val  
 65 70 75 80  
 Met Ala Val Thr Ala Val Thr Ala Thr Ala Ala Ser Asp Arg Met Glu  
 85 90 95  
 Ser Asp Ser Asp Ser Asp Lys Ser Ser Asp Asn Ser Gly Leu Lys Arg  
 100 105 110  
 Lys Thr Pro Ala Leu Lys Met Ser Val Ser Lys Arg Ala Arg Lys Ala  
 115 120 125  
 Ser Ser Asp Leu Asp Gln Ala Ser Val Ser Pro Ser Glu Glu Glu Asn  
 130 135 140  
 Ser Glu Ser Ser Ser Glu Ser Glu Lys Thr Ser Asp Gln Asp Phe Thr  
 145 150 155 160  
 Pro Glu Lys Lys Ala Ala Val Arg Ala Pro Arg Arg Gly Pro Leu Gly  
 165 170 175  
 Gly Arg Lys Lys Lys Lys Ala Pro Ser Ala Ser Asp Ser Asp Ser Lys  
 180 185 190  
 Ala Asp Ser Asp Gly Ala Lys Pro Glu Pro Val Ala Met Ala Arg Ser  
 195 200 205  
 Ala

<210> 5477  
 <211> 727  
 <212> DNA  
 <213> Homo sapiens

<400> 5477  
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 120  
 gggcccttct cactgagctc gtgaagtgcc tcagtcaagg caagggtccc tgggtccatat  
 180

gggccccccc gcccatgggg ttgggctggt ccttatagt cctacgttag tctgtgtgga  
 240  
 gcccttgccc agcgggggag aaaaagggtg cttctggtcc gtctgtataa aacatggccc  
 300  
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 360  
 cctggacccc tggttggtc ctcaacttca ctctccgcac ttagtgcccg gccgccccca  
 420  
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 600  
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 660  
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 720  
 gcggccg  
 727

&lt;210&gt; 5478

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5478

Ser	Ala	Ser	Val	Lys	Ala	Arg	Ser	Pro	Gly	Pro	Tyr	Gly	Pro	Pro	Arg
1				5					10					15	
Pro	Trp	Gly	Trp	Ala	Gly	Pro	Tyr	Ser	Ala	Tyr	Val	Ser	Leu	Cys	Gly
			20					25					30		
Ala	Pro	Gly	Gln	Arg	Gly	Arg	Lys	Arg	Trp	Leu	Leu	Val	Arg	Leu	Tyr
		35				40						45			
Lys	Thr	Trp	Pro	Leu	Thr	Cys	Arg	Pro	Pro	Thr	Gln	Leu	Ala	Gly	Trp
	50					55				60					
Ala	Gly	Leu	Ser	Pro	Leu	Ala	Ser	Pro	Gly	Pro	Leu	Ala	Gly	Ser	Ser
65				70				75						80	
Thr	Ser	Leu	Ser	Ala	Leu	Ser	Ala	Arg	Pro	Pro	Pro	Asp	Ser	Ser	Ser
			85					90						95	

Leu Ser Pro

&lt;210&gt; 5479

&lt;211&gt; 1386

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5479

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 cgggagcagc gggagcgcga ggagcaggag cggaggctgc aggcagaaaag ggacaagcga  
 120  
 atgcgagagg agcagctggc acgggaggcc gaggcccggg cggagcgga ggaggaggcc  
 180

cggaggcggg aggagcagga ggcacgagag aaggcgcagg ccgagcagga ggagcaggag  
 240  
 cggctgcaga agcagaaaga ggaggccgaa gctcggtcgc gggaagaggc ggagcggcag  
 300  
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 360  
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 600  
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 660  
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 720  
 gtggtgcagt ccccgaggt cacagaagtc ctttaagagg gtttgcttg gatccgggca  
 780  
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 900  
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 960  
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 1260  
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 1320  
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 1380  
 aaaaaa  
 1386

&lt;210&gt; 5480

&lt;211&gt; 251

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5480

Ala	Gly	Thr	Thr	Asp	Arg	Glu	Glu	Ala	Thr	Arg	Leu	Leu	Ala	Glu	Lys
1				5					10					15	
Arg	Arg	Gln	Ala	Arg	Glu	Gln	Arg	Glu	Arg	Glu	Glu	Gln	Glu	Arg	Arg
			20					25					30		
Leu	Gln	Ala	Glu	Arg	Asp	Lys	Arg	Met	Arg	Glu	Glu	Gln	Leu	Ala	Arg

35 40 45  
 Glu Ala Glu Ala Arg Ala Glu Arg Glu Ala Glu Ala Arg Arg Arg Glu  
 50 55 60  
 Glu Gln Glu Ala Arg Glu Lys Ala Gln Ala Glu Gln Glu Glu Gln Glu  
 65 70 75 80  
 Arg Leu Gln Lys Gln Lys Glu Glu Ala Glu Ala Arg Ser Arg Glu Glu  
 85 90 95  
 Ala Glu Arg Gln Arg Leu Glu Arg Glu Lys His Phe Gln Gln Gln Glu  
 100 105 110  
 Gln Glu Arg Gln Glu Arg Arg Lys Arg Leu Glu Glu Ile Met Lys Arg  
 115 120 125  
 Thr Arg Lys Ser Glu Val Ser Glu Thr Lys Gln Lys Gln Asp Ser Lys  
 130 135 140  
 Glu Ala Asn Ala Asn Gly Ser Ser Pro Glu Pro Val Lys Ala Val Glu  
 145 150 155 160  
 Ala Arg Ser Pro Gly Leu Gln Lys Glu Ala Val Gln Lys Glu Glu Pro  
 165 170 175  
 Ile Pro Gln Glu Pro Gln Trp Ser Leu Pro Ser Lys Glu Leu Pro Ala  
 180 185 190  
 Ser Leu Val Asn Gly Leu Gln Pro Leu Pro Ala His Gln Glu Asn Gly  
 195 200 205  
 Phe Ser Thr Asn Gly Pro Ser Gly Asp Lys Ser Leu Ser Arg Thr Pro  
 210 215 220  
 Glu Thr Leu Leu Pro Phe Ala Glu Ala Glu Ala Phe Leu Lys Lys Ala  
 225 230 235 240  
 Val Val Gln Ser Pro Gln Val Thr Glu Val Leu  
 245 250

<210> 5481  
 <211> 1513  
 <212> DNA  
 <213> Homo sapiens

<400> 5481  
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 120  
 ccggcagcca atcaggagag cgctcgctcc tgactcgacc ggcccacgct tcccgccagt  
 180  
 cccctaacc tgaggtgcc gcgcggcggt cactgcgccg gggtagtggg cccagtggtt  
 240  
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 300  
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 360  
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 420  
 ttctgtgtgg cccgcctgca ggattttaag cttgactttg gcaattccca aggcaaaaca  
 480  
 agtcaaactt ggcattggagg gatagccacc atttttcaga gtcttggcga tgaattgtgg  
 540  
 ggagtagtat ggaaaatgaa caaaagcaat ttaaattctc tggatgagca agaagggggt  
 600

aaaagtggaa tgtatgttgt aatagaagtt aaagttgcaa ctcaagaagg aaaagaaata  
 660  
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 720  
 aagattatgtt gcatgggtgc aaaagaaaat ggtttgccgc tggagtatca agagaagtta  
 780  
 aaagcaatag aaccaaatga ctatacagga aaggtctcag aagaaattga agacatcatc  
 840  
 aaaaaggggg aaacacaaac tctttagaac ataacagaat atatctaagg gtattctatg  
 900  
 tgctaataata aaatatgtttt aacacttgag aacagggatc tgggggatct ccacgtttga  
 960  
 tccattttca gcagtgtctt gaaggagtat cttacttggg tgattccttg tttttagact  
 1020  
 ataaaaagaa actgggatag gagttagaca atttaaaagg ggtgtatgag ggcctgaaat  
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 1260  
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<210> 5482

<211> 188

<212> PRT

<213> Homo sapiens

<400> 5482

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	50					55					60				
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Gly	Val	Val	Trp	Lys	Met	Asn	Lys	Ser	Asn	Leu	Asn	Ser	Leu	Asp	Glu
				85				90					95		
Gln	Glu	Gly	Val	Lys	Ser	Gly	Met	Tyr	Val	Val	Ile	Glu	Val	Lys	Val
			100					105					110		
Ala	Thr	Gln	Glu	Gly	Lys	Glu	Ile	Thr	Cys	Arg	Ser	Tyr	Leu	Met	Thr

	115		120		125	
Asn	Tyr	Glu	Ser	Ala	Pro	Pro
	130		135		140	
Met	Gly	Ala	Lys	Glu	Asn	Gly
145			150		155	
Lys	Ala	Ile	Glu	Pro	Asn	Asp
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&lt;210&gt; 5483

&lt;211&gt; 1552

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5483

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&lt;210&gt; 5484

&lt;211&gt; 357

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5484

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 Ile Asp Ile Ile Asn Leu Asp Thr Phe Thr Tyr Ile Glu Ser Ala Ser  
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 Glu Leu Arg Gly Gly Phe Asp Trp Ser Leu His Phe Gln Trp Glu Gln  
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 Arg Thr Pro Ile Ile Ala Gly Gly Leu Phe Val Ile Asp Lys Ala Trp  
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 Phe Asp Tyr Leu Gly Lys Tyr Asp Met Asp Met Asp Ile Trp Gly Gly  
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 Glu Asn Phe Glu Ile Ser Phe Arg Val Trp Met Cys Gly Gly Ser Leu  
 115 120 125  
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 145 150 155 160  
 Lys Arg Thr Ala Glu Val Trp Met Asp Glu Tyr Lys Gln Tyr Tyr Tyr  
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 180 185 190  
 Arg Leu Asp Leu Arg Lys Asn Leu Arg Cys Gln Ser Phe Lys Trp Tyr  
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<210> 5486

<211> 290

<212> PRT

<213> Homo sapiens

<400> 5486

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			20					25					30		
Arg	Ser	Arg	Ser	Arg	Ser	Phe	Ser	Arg	Ser	Ser	Arg	Ser	His	Ser	Arg
			35				40					45			
Val	Ser	Ser	Arg	Phe	Ser	Ser	Arg	Ser	Arg	Arg	Ser	Lys	Ser	Arg	Ser
			50				55				60				
Arg	Ser	Arg	Arg	Arg	His	Gln	Arg	Lys	Tyr	Arg	Arg	Tyr	Ser	Arg	Ser
65					70				75					80	
Tyr	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Arg	Tyr	Arg	Glu	Arg
			85					90						95	
Arg	Tyr	Gly	Phe	Thr	Arg	Arg	Tyr	Tyr	Arg	Ser	Pro	Ser	Arg	Tyr	Arg
			100					105					110		
Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Ser	Tyr	Cys	Gly
			115				120					125			
Arg	Ala	Tyr	Ala	Ile	Ala	Arg	Gly	Gln	Arg	Tyr	Tyr	Gly	Phe	Gly	Arg
			130				135					140			
Thr	Val	Tyr	Pro	Glu	Glu	His	Ser	Arg	Trp	Arg	Asp	Arg	Ser	Arg	Thr
145					150					155				160	
Arg	Ser	Arg	Ser	Arg	Thr	Pro	Phe	Arg	Leu	Ser	Glu	Lys	Asp	Arg	Met
			165					170					175		
Glu	Leu	Leu	Glu	Ile	Ala	Lys	Thr	Asn	Ala	Ala	Lys	Ala	Leu	Gly	Thr
			180					185					190		
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			195				200					205			
Glu	Thr	Ser	Arg	Gly	Ile	Gly	Val	Ser	Ser	Asn	Gly	Ala	Lys	Pro	Glu
			210				215					220			
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&lt;210&gt; 5487

&lt;211&gt; 1716

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5487

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<210> 5488

<211> 272

<212> PRT

<213> Homo sapiens

<400> 5488

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			20					25					30		
Gly	Phe	Trp	Arg	Pro	Leu	Arg	Gly	Val	Asn	Val	Met	Ile	Met	Gly	Ala
			35				40					45			
Gly	Pro	Ala	His	Ala	Met	Tyr	Phe	Ala	Cys	Tyr	Glu	Asn	Met	Lys	Arg
			50				55				60				
Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu	Ala	Asn
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Gly	Ile	Ala	Gly	Ser	Met	Ala	Thr	Leu	Leu	His	Asp	Ala	Val	Met	Asn
				85					90					95	
Pro	Ala	Glu	Val	Val	Lys	Gln	Arg	Leu	Gln	Met	Tyr	Asn	Ser	Gln	His
			100					105					110		
Arg	Ser	Ala	Ile	Ser	Cys	Ile	Arg	Thr	Val	Trp	Arg	Thr	Glu	Gly	Leu
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Gly	Ala	Phe	Tyr	Arg	Ser	Tyr	Thr	Thr	Gln	Leu	Thr	Met	Asn	Ile	Pro
			130				135					140			
Phe	Gln	Ser	Ile	His	Phe	Ile	Thr	Tyr	Glu	Phe	Leu	Gln	Glu	Gln	Val
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Leu	Ala	Gly	Ala	Leu	Ala	Ala	Ala	Ala	Thr	Thr	Pro	Leu	Asp	Val	Cys
			180				185						190		
Lys	Thr	Leu	Leu	Asn	Thr	Gln	Glu	Asn	Val	Ala	Leu	Ser	Leu	Ala	Asn
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Ile	Ser	Gly	Arg	Leu	Ser	Gly	Met	Ala	Asn	Ala	Phe	Arg	Thr	Val	Tyr

210		215		220	
Gln Leu Asn Gly Leu Ala Gly Tyr Phe Lys Gly Ile Gln Ala Arg Val					
225		230		235	240
Ile Tyr Gln Met Pro Ser Thr Ala Ile Ser Trp Ser Val Tyr Glu Phe					
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Phe Lys Tyr Phe Leu Thr Lys Arg Gln Leu Glu Asn Arg Ala Pro Tyr					
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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5490

&lt;211&gt; 357

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5490

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 Leu Glu Lys Ile Leu Gln Arg Gln Phe Ser Ser Ser Asn Ser Pro Arg  
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 145 150 155 160  
 Val Ala Thr Glu Gly Ser Arg Glu Leu Lys Arg Glu Leu Ile Asn Glu  
 165 170 175  
 Ala Leu Glu Thr Leu Met Glu Gln Ala Val Ala Ala Val Gln Lys Met  
 180 185 190  
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 195 200 205  
 Leu Thr Lys Arg Ala Ala Gln Ala Ala Gln Arg Glu Asn Gln Arg Gln  
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 Val Asn Val Asn Pro Asn Phe Ser Asn Tyr Tyr Asn Val Ser Arg Asp

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Pro	Val	Val	Ile	Asn	Lys	Val	Phe	Lys	Asp	Trp	Lys	Pro	Gly	Gly	Val
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Ile	Ser	Cys	Arg	Asn	Cys	Gly	Glu	Val	Trp	Gly	Leu	Gln	Met	Ile	Tyr
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Lys	Ser	Val	Lys	Leu	Pro	Val	Leu	Lys	Val	Arg	Ser	Met	Leu	Leu	Glu
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Thr	Pro	Gln	Gly	Arg	Ile	Gln	Ala	Lys	Lys	Trp	Ser	Arg	Val	Pro	Phe
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Ser	Val	Pro	Asp	Phe	Asp	Phe	Leu	Gln	His	Cys	Ala	Glu	Asn	Leu	Ser
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 <212> DNA  
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&lt;211&gt; 602

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5492

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5493

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 <213> Homo sapiens

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 1800  
 ttcaacattc cacatttgat gatgatacct ctttcttccc tgagtgtata tgttctaata  
 1860  
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 1918

<210> 5500

<211> 426

<212> PRT

<213> Homo sapiens

<400> 5500

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20						25						30					
Leu	Arg	Phe	Asn	Glu	Thr	Thr	Leu	Cys	Lys	Pro	Leu	Val	Pro	Arg	Glu		
35						40						45					
His	Gln	Phe	Tyr	Glu	Thr	Leu	Pro	Ala	Glu	Met	Arg	Lys	Phe	Thr	Pro		
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Gln	Tyr	Lys	Gly	Val	Val	Ser	Val	Arg	Phe	Glu	Glu	Asp	Glu	Asp	Arg		
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Asn	Leu	Cys	Leu	Ile	Ala	Tyr	Pro	Leu	Lys	Gly	Asp	His	Gly	Ile	Val		
			85						90			95					
Asp	Ile	Ala	His	Asn	Ser	Asp	Cys	Glu	Pro	Lys	Ser	Lys	Leu	Leu	Arg		
			100						105			110					
Trp	Thr	Thr	Asn	Lys	Lys	His	His	Val	Leu	Glu	Thr	Glu	Lys	Thr	Pro		
			115						120			125					
Lys	Asp	Trp	Val	Arg	Gln	His	Arg	Lys	Glu	Glu	Lys	Met	Lys	Ser	His		
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Lys	Leu	Glu	Glu	Glu	Phe	Glu	Trp	Leu	Lys	Lys	Ser	Glu	Val	Leu	Tyr		
145						150						155					
Tyr	Thr	Val	Glu	Lys	Lys	Gly	Asn	Ile	Ser	Ser	Gln	Leu	Lys	His	Tyr		
			165						170			175					
Asn	Pro	Trp	Ser	Met	Lys	Cys	His	Gln	Gln	Gln	Leu	Gln	Arg	Met	Lys		
			180						185			190					
Glu	Asn	Ala	Lys	His	Arg	Asn	Gln	Tyr	Lys	Phe	Ile	Leu	Leu	Glu	Asn		
195						200						205					
Leu	Thr	Ser	Arg	Tyr	Glu	Val	Pro	Cys	Val	Leu	Asp	Leu	Lys	Met	Gly		
210						215						220					
Thr	Arg	Gln	His	Gly	Asp	Asp	Ala	Ser	Glu	Glu	Lys	Ala	Ala	Asn	Gln		
225						230						235					
Ile	Arg	Lys	Cys	Gln	Gln	Ser	Thr	Ser	Ala	Val	Ile	Gly	Val	Xaa	Val		
			245						250			255					
Cys	Gly	Met	Gln	Val	Tyr	Gln	Ala	Gly	Ser	Gly	Gln	Leu	Met	Phe	Met		
			260						265			270					
Asn	Lys	Tyr	His	Gly	Arg	Lys	Leu	Ser	Val	Gln	Gly	Phe	Lys	Glu	Ala		
275						280						285					
Leu	Phe	Gln	Phe	Phe	His	Asn	Gly	Arg	Tyr	Leu	Arg	Arg	Glu	Leu	Leu		
290						295						300					
Gly	Pro	Val	Leu	Lys	Lys	Leu	Thr	Glu	Leu	Lys	Ala	Val	Leu	Glu	Arg		
305						310						315					
Gln	Glu	Ser	Tyr	Arg	Phe	Tyr	Ser	Ser	Ser	Leu	Leu	Val	Ile	Tyr	Asp		
			325						330			335					
Gly	Lys	Glu	Arg	Pro	Glu	Val	Val	Leu	Asp	Ser	Asp	Ala	Glu	Asp	Leu		
			340						345			350					
Glu	Asp	Leu	Ser	Glu	Glu	Ser	Ala	Asp	Glu	Ser	Ala	Gly	Ala	Tyr	Ala		
355						360						365					
Tyr	Lys	Pro	Ile	Gly	Ala	Ser	Ser	Val	Asp	Val	Arg	Met	Ile	Asp	Phe		
370						375						380					
Ala	His	Thr	Thr	Cys	Arg	Leu	Tyr	Gly	Glu	Asp	Thr	Val	Val	His	Glu		
385						390						395					
Gly	Gln	Asp	Ala	Gly	Tyr	Ile	Phe	Gly	Leu	Gln	Ser	Leu	Ile	Asp	Ile		
			405						410			415					
Val	Thr	Glu	I														

<210> 5501

<211> 568

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5501

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 480  
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 568

&lt;210&gt; 5502

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5502

Met	Ile	Leu	Gly	Lys	Arg	Leu	His	Leu	Asn	Phe	Arg	Tyr	Phe	Thr	Cys
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Glu	Ala	Gly	Thr	Lys	Pro	Cys	Ser	Ser	Glu	Val	Pro	Val	Gly	Ala	Gly
			20					25					30		
Gly	Ala	Ala	Leu	Gln	Val	Leu	Ala	His	Ala	Gln	Gln	Ala	Pro	His	Ser
			35				40					45			
Phe	Val	Thr	Thr	Lys	Gly	Thr	Val	Leu	Phe	Thr	Ala	Pro	Pro	Ala	Ser
	50					55				60					
Ala	Trp	Gln	Leu	Cys	Leu	Pro	Val	Leu	Tyr	Leu	Ile	Pro	Pro	Ala	Lys
65					70				75					80	
Leu	Ala	Arg	Gln	Gly	Pro	Ala	Leu	Lys	Glu	Ile	Ser	Leu	Pro	Asp	Pro
			85					90					95		
Trp	Thr	Trp	Lys	Trp	Arg	Leu	His	Val	Pro	Ala	Leu	Ala	Ala		
			100					105					110		

&lt;210&gt; 5503

&lt;211&gt; 1679

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5503

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180  
aggtagacaa attaaagctt aagatcaaac cgtttgcaaa gcaggaagca gcacttcctc  
240  
ttgggtccagt tcttccttct ccctgggtgct aagggtcagt gatgttggct cccacagggc  
300  
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360  
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420  
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480  
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720  
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780  
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1440  
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1560  
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1679

<210> 5504  
 <211> 392  
 <212> PRT  
 <213> Homo sapiens

<400> 5504

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Leu Pro Pro Ser Cys Thr Ile Ser Gly Glu Lys Lys Pro Pro Ala Val
 35           40           45
Ser Gly Glu Ala Thr Gly Ala Asp Ala Gly Arg Leu Cys Pro Pro Pro
 50           55           60
Arg Ser Arg Ala Pro His Lys Asp Arg Thr Leu Ala Arg Ser Arg Pro
 65           70           75           80
Gln Thr Gln Gly Glu Asp Cys Ser Leu Pro Val Gly Glu Val Lys Ile
 85           90           95
Gly Lys Arg Ser Tyr Ser Pro Ala Pro Gly Lys Gln Lys Lys Pro Asn
 100          105          110
Ala Met Gly Leu Ala Pro Thr Ser Ser Pro Gly Ala Pro Asn Ser Ala
 115          120          125
Arg Ala Thr His Asn Pro Val Pro Cys Gly Ser Gly Arg Gly Pro Cys
 130          135          140
His Leu Ala Asn Leu Leu Ser Thr Leu Ala Gln Ser Asn Gln Asn Arg
 145          150          155          160
Asp His Lys Gln Gly Pro Pro Glu Val Thr Cys Gln Ile Arg Lys Lys
 165          170          175
Thr Arg Thr Leu Tyr Arg Ser Asp Gln Leu Glu Glu Leu Glu Lys Ile
 180          185          190
Phe Gln Glu Asp His Tyr Pro Asp Ser Asp Lys Arg Arg Glu Ile Ala
 195          200          205
Gln Thr Val Gly Val Thr Pro Gln Arg Ile Met Val Lys Gly Ala Gly
 210          215          220
Ser Leu Val Ala Gly Trp Ser Gly Gly Gly Pro Thr Ile Glu Thr Leu
 225          230          235          240
Glu Leu Gln Ser Glu Arg Ser Ala Val Ala Trp Val Trp Phe Gln Asn
 245          250          255
Arg Arg Ala Lys Trp Arg Lys Met Glu Lys Leu Asn Gly Lys Glu Ser
 260          265          270
Lys Asp Asn Pro Ala Ala Pro Gly Pro Ala Ser Ser Gln Cys Ser Ser
 275          280          285
Ala Ala Glu Ile Leu Pro Ala Val Pro Met Glu Pro Lys Pro Asp Pro
 290          295          300
Phe Pro Gln Glu Ser Pro Leu Asp Thr Phe Pro Glu Pro Pro Met Leu
 305          310          315          320
Leu Thr Ser Asp Gln Thr Leu Ala Pro Thr Gln Pro Ser Glu Gly Ala
 325          330          335
Gln Arg Val Val Thr Pro Pro Leu Phe Ser Pro Pro Pro Val Arg Arg
 340          345          350
Ala Asp Leu Pro Phe Pro Leu Gly Pro Val His Thr Pro Gln Leu Met
 355          360          365
Pro Leu Leu Met Asp Val Ala Gly Ser Asp Ser Ser His Lys Asp Gly

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370 375 380  
 Pro Cys Gly Ser Trp Gly Thr Arg  
 385 390

<210> 5505  
 <211> 1099  
 <212> DNA  
 <213> Homo sapiens

<400> 5505  
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 180  
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 300  
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 420  
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 1099

<210> 5506  
 <211> 280  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 5506

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 Glu Leu Pro Glu Asn Ile Leu Leu Glu Leu Phe Thr His Val Pro Ala  
 35 40 45  
 Arg Gln Leu Leu Leu Asn Cys Arg Leu Val Cys Ser Leu Trp Arg Asp  
 50 55 60  
 Leu Ile Asp Leu Val Thr Leu Trp Lys Arg Lys Cys Leu Arg Glu Gly  
 65 70 75 80  
 Phe Ile Thr Glu Asp Trp Asp Gln Pro Val Ala Asp Trp Lys Ile Phe  
 85 90 95  
 Tyr Phe Leu Arg Ser Leu His Arg Asn Leu Leu His Asn Pro Cys Ala  
 100 105 110  
 Glu Glu Gly Phe Glu Phe Trp Ser Leu Asp Val Asn Gly Gly Asp Glu  
 115 120 125  
 Trp Lys Val Glu Asp Leu Ser Arg Asp Gln Arg Lys Glu Phe Pro Asn  
 130 135 140  
 Asp Gln Val Lys Lys Tyr Phe Val Thr Ser Tyr Tyr Thr Cys Leu Lys  
 145 150 155 160  
 Ser Gln Val Val Asp Leu Lys Ala Glu Gly Tyr Trp Glu Glu Leu Leu  
 165 170 175  
 Asp Thr Phe Arg Pro Asp Ile Val Val Lys Asp Trp Phe Ala Ala Arg  
 180 185 190  
 Ala Asp Cys Gly Cys Thr Tyr Gln Leu Lys Val Gln Leu Leu Ser Ala  
 195 200 205  
 Asp Tyr Phe Val Leu Ala Ser Phe Glu Pro Asp Pro Ala Thr Ile Gln  
 210 215 220  
 Gln Lys Ser Asp Ala Lys Trp Arg Glu Val Ser His Thr Phe Ser Asn  
 225 230 235 240  
 Tyr Pro Pro Gly Val Arg Tyr Ile Trp Phe Gln His Gly Gly Val Asp  
 245 250 255  
 Thr His Tyr Trp Ala Gly Trp Tyr Gly Pro Arg Val Thr Asn Ser Ser  
 260 265 270  
 Ile Thr Ile Gly Pro Pro Leu Pro  
 275 280

&lt;210&gt; 5507

&lt;211&gt; 1658

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5507

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 120  
 aagcaatttc tcacctttga caaacaggtc cttcgattct atgcaatctg ggatgatata  
 180  
 gacagcatgt atggtgaatg tcggacctac atcattcatt actatcttat ggatgatagc  
 240  
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aaccgccagc gtgtgcccaa agttttgggtg gaaaatgcaa agaacttccc tcagtgtgtg  
360  
ctagaaatct ctgaccaaga agtggttgaa tggatatactg ctaaagactt cattgttggg  
420  
aagtcactca ctatccttgg gagaactttc ttcatttatg attgtgatcc atttactcga  
480  
cgggtattaca aagagaagtt tggaatcact gatttaccac gtattgatgt gagcaagcgg  
540  
gaaccacctc cagtaaaaca ggagttgcct ccttataacg gttttggact agtgggaagat  
600  
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720  
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1620  
aaaaaataaa ttttttttga gatgggaaaa aaaaaaaa  
1658

&lt;210&gt; 5508

&lt;211&gt; 448

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5508

Xaa Leu Glu Ser Gln Gly Ile Glu Leu Asn Pro Pro Glu Lys Met Ala

1	5	10	15
Leu Asp Pro Tyr Thr Glu Leu Arg Lys Gln Pro Leu Arg Lys Tyr Val			
20	25	30	
Thr Pro Ser Asp Phe Asp Gln Leu Lys Gln Phe Leu Thr Phe Asp Lys			
35	40	45	
Gln Val Leu Arg Phe Tyr Ala Ile Trp Asp Asp Thr Asp Ser Met Tyr			
50	55	60	
Gly Glu Cys Arg Thr Tyr Ile Ile His Tyr Tyr Leu Met Asp Asp Thr			
65	70	75	80
Val Glu Ile Arg Glu Val His Glu Arg Asn Asp Gly Arg Asp Pro Phe			
85	90	95	
Pro Leu Leu Met Asn Arg Gln Arg Val Pro Lys Val Leu Val Glu Asn			
100	105	110	
Ala Lys Asn Phe Pro Gln Cys Val Leu Glu Ile Ser Asp Gln Glu Val			
115	120	125	
Leu Glu Trp Tyr Thr Ala Lys Asp Phe Ile Val Gly Lys Ser Leu Thr			
130	135	140	
Ile Leu Gly Arg Thr Phe Phe Ile Tyr Asp Cys Asp Pro Phe Thr Arg			
145	150	155	160
Arg Tyr Tyr Lys Glu Lys Phe Gly Ile Thr Asp Leu Pro Arg Ile Asp			
165	170	175	
Val Ser Lys Arg Glu Pro Pro Pro Val Lys Gln Glu Leu Pro Pro Tyr			
180	185	190	
Asn Gly Phe Gly Leu Val Glu Asp Ser Ala Gln Asn Cys Phe Ala Leu			
195	200	205	
Ile Pro Lys Ala Pro Lys Lys Asp Val Ile Lys Met Leu Val Asn Asp			
210	215	220	
Asn Lys Val Leu Arg Tyr Leu Ala Val Leu Glu Ser Pro Ile Pro Glu			
225	230	235	240
Asp Lys Asp Arg Arg Phe Val Phe Ser Tyr Phe Leu Ala Thr Asp Met			
245	250	255	
Ile Ser Ile Phe Glu Pro Pro Val Arg Asn Ser Gly Ile Ile Gly Gly			
260	265	270	
Lys Tyr Leu Gly Arg Thr Lys Val Lys Pro Tyr Ser Thr Val Asp			
275	280	285	
Asn Pro Val Tyr Tyr Gly Pro Ser Asp Phe Phe Ile Gly Ala Val Ile			
290	295	300	
Glu Val Phe Gly His Arg Phe Ile Ile Leu Asp Thr Asp Glu Tyr Val			
305	310	315	320
Leu Lys Tyr Met Glu Ser Asn Ala Ala Gln Tyr Ser Pro Glu Ala Leu			
325	330	335	
Ala Ser Ile Gln Asn His Val Arg Lys Arg Glu Ala Pro Ala Pro Glu			
340	345	350	
Ala Glu Ser Lys Gln Thr Glu Lys Asp Pro Gly Val Gln Glu Leu Glu			
355	360	365	
Ala Leu Ile Asp Thr Ile Gln Lys Gln Leu Lys Asp His Ser Cys Lys			
370	375	380	
Asp Asn Ile Arg Glu Ala Phe Gln Ile Tyr Asp Lys Glu Ala Ser Gly			
385	390	395	400
Tyr Val Asp Arg Asp Met Phe Phe Lys Ile Cys Glu Ser Leu Asn Val			
405	410	415	
Pro Val Asp Asp Ser Leu Val Lys Glu Leu Ile Arg Met Cys Ser His			
420	425	430	
Gly Glu Gly Lys Ile Asn Tyr Tyr Asn Phe Val Arg Ala Phe Ser Asn			



435

440

445

<210> 5509  
 <211> 818  
 <212> DNA  
 <213> Homo sapiens

<400> 5509  
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 60  
 aaggagagct gtatttgtgt ttcattggtg ctttaccaaa taattctagc atcggaattg  
 120  
 ctatgtgaga ggaagtaagt atacacagcg taagaggtgt gataaccaag tcatagaaga  
 180  
 aatgtttgga gaacatggaa tcatgtgaac ttattatgtg gtaagtacag ataccaggg  
 240  
 ctgtcagtct caccatcctt ttctacacat gtggatgctt caggactcca gcctttgagg  
 300  
 atgtggcttt caacttcacc ctacaggaaa ggtagtcaat gtggagaagc cttcagccag  
 360  
 attccaggtc ataatctgaa taagaaaacg cctcctggag taaagccacc tgaaagccat  
 420  
 gtgtgtggag aggtcggcgt gggctatcca tccactgaaa ggcacatcag agatcgctt  
 480  
 ggacgcaaac cctgtgaata tcaggaatgt agacagaagg catatacatg taagccatgt  
 540  
 gggaatgcct ttcgttttca ccactccttt cacatacacg aaaggcctca cagtggagaa  
 600  
 aacctctatg aatgttagga atttcagaaa acattcactt ccccccaaa ctttcaaaga  
 660  
 tgtgaaaatg catagtggag atggacctta caaatgcaag gtgggtagga aaacctttga  
 720  
 ctctcccagt tcatttcgaa tacatggaag atctcattct ggagagaaaac ccaatgtgtg  
 780  
 taggcactgt gggagcacct acaatcattt cagttttg  
 818

<210> 5510  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 5510  
 Met Trp Leu Ser Thr Ser Pro Tyr Arg Lys Gly Ser Gln Cys Gly Glu  
 1 5 10 15  
 Ala Phe Ser Gln Ile Pro Gly His Asn Leu Asn Lys Lys Thr Pro Pro  
 20 25 30  
 Gly Val Lys Pro Pro Glu Ser His Val Cys Gly Glu Val Gly Val Gly  
 35 40 45  
 Tyr Pro Ser Thr Glu Arg His Ile Arg Asp Arg Leu Gly Arg Lys Pro  
 50 55 60  
 Cys Glu Tyr Gln Glu Cys Arg Gln Lys Ala Tyr Thr Cys Lys Pro Cys  
 65 70 75 80  
 Gly Asn Ala Phe Arg Phe His His Ser Phe His Ile His Glu Arg Pro

85 90 95  
 His Ser Gly Glu Asn Leu Tyr Glu Cys  
 100 105

<210> 5511  
 <211> 379  
 <212> DNA  
 <213> Homo sapiens

<400> 5511  
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 60  
 ccttccttgg gaaaagaggg catcgtctca atcgcatagt cacacacatc ccttaactca  
 120  
 ctctgctgag ttgctgagag tctgtgttcc tctctccact tataggatgg gtcctcatct  
 180  
 tcttgagctt caagcccca ggcagagacc tggctgctcc tcatgggagc ctcagggata  
 240  
 atgctgaatt cctctatggc agagatggga ggagaggctc cacgctgggc ctcctcagcc  
 300  
 tccatcaggg ctgaatcctg gtcggtgtca catgctgctt cggccccagc gtccccctcca  
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 ggtcccggcg ccggccgcn  
 379

<210> 5512  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 5512  
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 1 5 10 15  
 Ile Glu Glu Phe Ser Ile Ile Pro Glu Ala Pro Met Arg Ser Ser Gln  
 20 25 30  
 Val Ser Ala Leu Gly Leu Glu Ala Gln Glu Asp Glu Asp Pro Ser Tyr  
 35 40 45  
 Lys Trp Arg Glu Glu His Arg Leu Ser Ala Thr Gln Gln Ser Glu Leu  
 50 55 60  
 Arg Asp Val Cys Asp Tyr Ala Ile Glu Thr Met Pro Ser Phe Pro Lys  
 65 70 75 80  
 Glu Gly Ser Ala Asp Val Glu Pro Asn Gln Glu Ser Leu Val Ala Glu  
 85 90 95  
 Ala Cys Asp Thr Pro  
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<210> 5513  
 <211> 837  
 <212> DNA  
 <213> Homo sapiens

<400> 5513  
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 60

aaggccacag ccgcggccct gggcagtttc ccggcaggtg gcccggccga gctgtcgctg  
120  
agactcgggg agccattgac catcgtctct gaggatggag actggtggac ggtgctgtct  
180  
gaagtctcag gcagagagta taacatcccc agcgtccacg tggccaaagt ctcccatggg  
240  
tggctgtatg agggcctgag caggagagaaa gcagaggacc tgctgttggt acctgggaac  
300  
cctggagggg ccttctcat ccgggagagc cagaccagga gaggtcttta ctctctgtca  
360  
gtccgcctca gccgcctgc atcctgggac cggatcagac actacaggat ccactgcctt  
420  
gacaatggct ggctgtacat ctcaccgcgc ctcaccttcc cctcactcca ggccttgggtg  
480  
gaccattact ctgagctggc ggatgacatc tgctgcctac tcaaggagcc ctgtgtcctg  
540  
cagagggctg gccgcctccc tggcaaggat ataccctac ctgtgactgt gcagaggaca  
600  
ccactcaact ggaaagagct ggacagctcc ctctgtttt ctgaagctgc cacaggggag  
660  
gagtctcttc tcagtgaggg tctccgggag tccctcagct tctacatcag cctgaatgac  
720  
gaggctgtct ctttggatga tgctaggcc caaaggagag gccaaaaggg aaaccaaggc  
780  
tgcacaccta gaacccaat tcagcctcct gggcacccca gaggcaaggc tgtgcac  
837

&lt;210&gt; 5514

&lt;211&gt; 248

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5514

Xaa	Ser	Leu	Ser	Ser	Ser	Val	Gln	Gly	Gln	Gly	Pro	Val	Thr	Met	Glu
1				5					10					15	
Ala	Glu	Arg	Ser	Lys	Ala	Thr	Ala	Ala	Ala	Leu	Gly	Ser	Phe	Pro	Ala
			20					25					30		
Gly	Gly	Pro	Ala	Glu	Leu	Ser	Leu	Arg	Leu	Gly	Glu	Pro	Leu	Thr	Ile
			35				40					45			
Val	Ser	Glu	Asp	Gly	Asp	Trp	Trp	Thr	Val	Leu	Ser	Glu	Val	Ser	Gly
	50					55				60					
Arg	Glu	Tyr	Asn	Ile	Pro	Ser	Val	His	Val	Ala	Lys	Val	Ser	His	Gly
65					70				75					80	
Trp	Leu	Tyr	Glu	Gly	Leu	Ser	Arg	Glu	Lys	Ala	Glu	Asp	Leu	Leu	Leu
				85				90					95		
Leu	Pro	Gly	Asn	Pro	Gly	Gly	Ala	Phe	Leu	Ile	Arg	Glu	Ser	Gln	Thr
			100				105					110			
Arg	Arg	Gly	Ser	Tyr	Ser	Leu	Ser	Val	Arg	Leu	Ser	Arg	Pro	Ala	Ser
		115				120					125				
Trp	Asp	Arg	Ile	Arg	His	Tyr	Arg	Ile	His	Cys	Leu	Asp	Asn	Gly	Trp
	130				135					140					
Leu	Tyr	Ile	Ser	Pro	Arg	Leu	Thr	Phe	Pro	Ser	Leu	Gln	Ala	Leu	Val
145				150					155					160	
Asp	His	Tyr	Ser	Glu	Leu	Ala	Asp	Asp	Ile	Cys	Cys	Leu	Leu	Lys	Glu

165								170				175			
Pro	Cys	Val	Leu	Gln	Arg	Ala	Gly	Pro	Leu	Pro	Gly	Lys	Asp	Ile	Pro
180								185				190			
Leu	Pro	Val	Thr	Val	Gln	Arg	Thr	Pro	Leu	Asn	Trp	Lys	Glu	Leu	Asp
195								200				205			
Ser	Ser	Leu	Leu	Phe	Ser	Glu	Ala	Ala	Thr	Gly	Glu	Glu	Ser	Leu	Leu
210								215				220			
Ser	Glu	Gly	Leu	Arg	Glu	Ser	Leu	Ser	Phe	Tyr	Ile	Ser	Leu	Asn	Asp
225								230				235			
Glu	Ala	Val	Ser	Leu	Asp	Asp	Ala								
245															

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<210> 5515
<211> 420
<212> DNA
<213> Homo sapiens
```

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<400> 5515
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gaaaggatgt ccgcacagct ggctgctgct gagagcagac aaaagaagct ggaaatggag
120
aagcttcagc tacaagccct tgagcaagag cacaagaagc tggctgcccg ccttgaggaa
180
gagcgtggca agaacaagca ggtggtcctg atgctggtca aagagtgcaa gcagctctca
240
agcaaagtca tagaggaggc ccagaagctc gaagacgtaa tggccaaact ggcttcttct
300
ctttgtcacc agcacctgct tcatagtctc tctggagtgc caggaacggg tcatatagat
360
taaattctccc ataccgttcc tggataaata cctccttcct gcgagcccgc agggcctcga
420
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<210> 5516
<211> 120
<212> PRT
<213> Homo sapiens
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```

<400> 5516
Val Cys Thr Asn Pro Leu Ser Ile Leu Glu Ala Val Met Ala His Cys
 1          5          10          15
Lys Lys Met Gln Glu Arg Met Ser Ala Gln Leu Ala Ala Ala Glu Ser
          20          25          30
Arg Gln Lys Lys Leu Glu Met Glu Lys Leu Gln Leu Gln Ala Leu Glu
          35          40          45
Gln Glu His Lys Lys Leu Ala Ala Arg Leu Glu Glu Glu Arg Gly Lys
          50          55          60
Asn Lys Gln Val Val Leu Met Leu Val Lys Glu Cys Lys Gln Leu Ser
65          70          75          80
Ser Lys Val Ile Glu Glu Ala Gln Lys Leu Glu Asp Val Met Ala Lys
          85          90          95
Leu Ala Ser Ser Leu Cys His Gln His Leu Leu His Ser Leu Ser Gly
          100          105          110
Val Pro Gly Thr Gly His Ile Asp

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115

120

<210> 5517  
 <211> 804  
 <212> DNA  
 <213> Homo sapiens

<400> 5517  
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 gtactgtact gttgtgatct actgattggc attggcatag tagtagggtc aagtgcacaga  
 120  
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 180  
 caaccaacac atggtgacat ggtgattgtg ccaacttggt gctcagttat atgcagggcc  
 240  
 agtgattggt ttaagtgaag accatgggtg agatcatttg tctttggtct aatagaattt  
 300  
 gagctagtag aatttgagtc tccagggaaa gagctacttg accaaattaa actagtagca  
 360  
 ggtagagcat gaatgacagc atattatacc atcaagatgt tcttagagca gtgtatggat  
 420  
 ggatcgattg tactgccatc agttgtgact gacgttggtat tcaaggagaa agagaaactt  
 480  
 gtttagaaaag cactttgaaa gttttttgag tacgggggtg ccctgtatca ccccgttatg  
 540  
 gttgaacttt ctcttcaaaa attaccagac ttggcagcag tggcaaatta ttgggctaaa  
 600  
 agacttaatc agacatattc tgggttcaag gctcctaata taatacctgg tgcaaacatt  
 660  
 atacttccac tcattcagat ggttgcaccc tgccaggcat ccagtgggac tgggaatatg  
 720  
 gacacttgaa cattaacat cctgaagaat tttggaatga cagggttaca gtgaacataa  
 780  
 tcagttctct atattaaaaa aaaa  
 804

<210> 5518  
 <211> 85  
 <212> PRT  
 <213> Homo sapiens

<400> 5518  
 Xaa Val Trp Pro Lys His Lys Gly Lys Asp Pro Gln Phe Thr Phe Leu  
 1 5 10 15  
 Glu Leu Ser Ser Val Leu Tyr Cys Cys Asp Leu Leu Ile Gly Ile Gly  
 20 25 30  
 Ile Val Val Gly Ser Ser Asp Arg Ile Arg Ala Ser Ser Leu Gln Val  
 35 40 45  
 Gln Lys Gln Phe Lys Thr Leu Met Ile Ala Leu Gln Gln Pro Thr His  
 50 55 60  
 Gly Asp Met Val Ile Val Pro Thr Cys Cys Ser Val Ile Cys Arg Ala  
 65 70 75 80  
 Ser Asp Trp Phe Lys

85

<210> 5519  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

<400> 5519  
 ctccataaca tccattttcc tattatgagc agaggaaata aacatgcaga tggcttggtt  
 60  
 tccttcgcat aacttgtaga ggggtaggta gcataaaaga cagccggtct caagaagcaa  
 120  
 ccatgcgcct cactacttac catgttcctg cgggcattcc cctcccgaag ggagtctctg  
 180  
 aaaacaaaca cacacagaag ttggcgctgg gcaccacatt ctctcttga cctaaccatc  
 240  
 aggaatttgc tgtgccatct gttcataaaa cttagccagg cccagaaagc ttgtcccaac  
 300  
 cacatgctaa gagccaagca gatggaacag aagctcccc aagctgctgg ctcccactat  
 360  
 ggctgggatg aagcaagaac ctgggcccac acaggctgca a  
 401

<210> 5520  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 5520  
 Met Trp Leu Gly Gln Ala Phe Trp Ala Trp Leu Ser Phe Met Asn Arg  
 1 5 10 15  
 Trp His Ser Lys Phe Leu Met Val Arg Ser Arg Gly Glu Cys Gly Ala  
 20 25 30  
 Gln Arg Gln Leu Leu Cys Val Phe Val Phe Arg Asp Ser Leu Arg Glu  
 35 40 45  
 Gly Asn Ala Arg Arg Asn Met Val Ser Ser Glu Ala His Gly Cys Phe  
 50 55 60  
 Leu Arg Pro Ala Val Phe Tyr Ala Thr Tyr Pro Cys Thr Ser Tyr Ala  
 65 70 75 80  
 Lys Glu Thr Lys Pro Ser Ala Cys Leu Phe Pro Leu Leu Ile Ile Gly  
 85 90 95  
 Lys Trp Met Leu Trp  
 100

<210> 5521  
 <211> 2524  
 <212> DNA  
 <213> Homo sapiens

<400> 5521  
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 60  
 cgcggttggc tactcagtgt cttggtctca agttgctca ttgcggctgg cgttcccaat  
 120

acagacgcat cgtttctttt ttaatactcc ctaagaaagg gaataacctt caagctggcg  
180  
ggagcaatgg ttcacataaa gaaaggcgag ctgaccagg aggagaagga gctactggaa  
240  
gtcatcgga aagggtactgt ccaagaagct ggaacattat tatccagcaa gaatgttcgt  
300  
gtcaactgtt tggacgagaa tggaatgact cctctaagtc atgcagcata taaaggaaaa  
360  
ctcgatatgt gcaaattact actgagacat ggagccgatg taaattgtca tcagcatgaa  
420  
catggataca cagccctcat gtttgctgca ctttctggta ataaagacat cacatgggta  
480  
atgttagagg ctggtgctga gacagatgtt gtcaactctg tgggaagaac agcagctcag  
540  
atggcagcct ttgtgggtca acatgattgt gtgaccataa tcaacaattt ctttctcga  
600  
gagagactgg attattacac taagccccag ggactggata aagagccaaa actgccccca  
660  
aagttggcag gcccgctgca caaaattatc accacaacga atcttcatcc tgtcaagatc  
720  
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780  
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840  
gctatgaaga tgcattacat aagctgtatc tttcagaaat gcattaactt cttaaaagat  
900  
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960  
ttccagtgat atcaagaaaa gatcattaga gaaagtatca gaaaatttcc atactgtgaa  
1020  
gccacactcc tacagcagct ggtgcgaagc atcgctccag ttgaaattgg ttctgatccc  
1080  
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1140  
ttttgcacta cctgtggaga aaaggagca agtaaaagat gttcagtttg caaaatggta  
1200  
atatattgtg atcaaacctg ccagaaaaca cactggttta ctcataagaa aatctgtaag  
1260  
aatctgaagg acatttacga aaagcaacag ttggaggctg ccaaagaaaa gagacaagag  
1320  
gaaaaccacg gcaaacttga tgtcaattct aactgtgtta atgaagagca accagaggct  
1380  
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1440  
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1500  
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1560  
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1620  
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1680  
cctattgatt tctgttctat gattgaatgg atattcctat ggaaaatttt ttgtttcaaa  
1740

atacaggaaa aacataccta ttacctttct gaggtggct ttccagcaat tgtttcaaag  
 1800  
 gaaaatagat ccccttaaag aaaaaataca ggctttaggg aacaaagggg caagcagaac  
 1860  
 aggtgtggaa gagagatttt caggaagggg aaaatttata gctacagagg gtagttagaa  
 1920  
 aaatcataac ttatatgtga ataaaataca tataagcagc atttacggta gtggcattct  
 1980  
 acttattaag atgcaatgaa atgaagaaag gctttatgtt caaggacctt tgccatagtt  
 2040  
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 2100  
 cggatgatt ctatctgcag tatttgtacc tccagaatgg cagatccctc agcaggaaca  
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 2280  
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 2340  
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 2400  
 ttttaacaga gctagaatgt gatgtctgaa gataatgctg catttctggg tttcttgtgt  
 2460  
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 2520  
 aaaa  
 2524

<210> 5522

<211> 441

<212> PRT

<213> Homo sapiens

<400> 5522

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Leu	Glu	Val	Ile	Gly	Lys	Gly	Thr	Val	Gln	Glu	Ala	Gly	Thr	Leu	Leu
			20					25					30		
Ser	Ser	Lys	Asn	Val	Arg	Val	Asn	Cys	Leu	Asp	Glu	Asn	Gly	Met	Thr
		35					40					45			
Pro	Leu	Met	His	Ala	Ala	Tyr	Lys	Gly	Lys	Leu	Asp	Met	Cys	Lys	Leu
		50				55					60				
Leu	Leu	Arg	His	Gly	Ala	Asp	Val	Asn	Cys	His	Gln	His	Glu	His	Gly
65				70						75				80	
Tyr	Thr	Ala	Leu	Met	Phe	Ala	Ala	Leu	Ser	Gly	Asn	Lys	Asp	Ile	Thr
			85					90						95	
Trp	Val	Met	Leu	Glu	Ala	Gly	Ala	Glu	Thr	Asp	Val	Val	Asn	Ser	Val
			100					105					110		
Gly	Arg	Thr	Ala	Ala	Gln	Met	Ala	Ala	Phe	Val	Gly	Gln	His	Asp	Cys
		115				120						125			
Val	Thr	Ile	Ile	Asn	Asn	Phe	Phe	Pro	Arg	Glu	Arg	Leu	Asp	Tyr	Tyr
		130				135					140				
Thr	Lys	Pro	Gln	Gly	Leu	Asp	Lys	Glu	Pro	Lys	Leu	Pro	Pro	Lys	Leu



145					150					155					160
Ala	Gly	Pro	Leu	His	Lys	Ile	Ile	Thr	Thr	Thr	Asn	Leu	His	Pro	Val
				165					170					175	
Lys	Ile	Val	Met	Leu	Val	Asn	Glu	Asn	Pro	Leu	Leu	Thr	Glu	Glu	Ala
			180					185					190		
Ala	Leu	Asn	Lys	Cys	Tyr	Arg	Val	Met	Asp	Leu	Ile	Cys	Glu	Lys	Cys
		195					200					205			
Met	Lys	Gln	Arg	Asp	Met	Asn	Glu	Val	Leu	Ala	Met	Lys	Met	His	Tyr
	210					215					220				
Ile	Ser	Cys	Ile	Phe	Gln	Lys	Cys	Ile	Asn	Phe	Leu	Lys	Asp	Gly	Glu
225					230					235					240
Asn	Lys	Leu	Asp	Thr	Leu	Ile	Lys	Ser	Leu	Leu	Lys	Gly	Arg	Ala	Ser
			245					250						255	
Asp	Gly	Phe	Pro	Val	Tyr	Gln	Glu	Lys	Ile	Ile	Arg	Glu	Ser	Ile	Arg
		260					265						270		
Lys	Phe	Pro	Tyr	Cys	Glu	Ala	Thr	Leu	Leu	Gln	Gln	Leu	Val	Arg	Ser
	275						280					285			
Ile	Ala	Pro	Val	Glu	Ile	Gly	Ser	Asp	Pro	Thr	Ala	Phe	Ser	Val	Leu
	290					295					300				
Thr	Gln	Ala	Ile	Thr	Gly	Gln	Val	Gly	Phe	Val	Asp	Val	Glu	Phe	Cys
305					310					315					320
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<212> DNA

<213> Homo sapiens

<400> 5523

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<211> 1193

<212> PRT

<213> Homo sapiens

<400> 5524

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Ala	Ile	His	Gln	Lys	Gly	His	Pro	Pro	Phe	Glu	His	Ser	Pro	Ile	Arg
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Phe	Cys	Thr	Gln	Asn	Gly	Asp	Tyr	Ile	Ile	Leu	Asp	Ser	Ser	Trp	Ser
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Gly	Tyr	Gly	Ser	Leu	Gly	Ser	Ser	Gly	Ser	Gln	Glu	Gln	Leu	Val	Ser
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Lys Ala Lys Tyr Ser Tyr Phe Gln Gly Asp Ser Thr Ser Lys Gln Thr
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&lt;211&gt; 761

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5525

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<213> Homo sapiens

<400> 5526

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<210> 5527

<211> 728

<212> DNA

<213> Homo sapiens

<400> 5527

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<210> 5528

<211> 176

<212> PRT

<213> Homo sapiens

<400> 5528

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<211> 2602

<212> DNA

<213> Homo sapiens

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&lt;210&gt; 5530

&lt;211&gt; 603

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5530

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Arg	Leu	Leu	Ser	Cys	Pro	Gly	Thr	Val	Ala	Lys	Asp	Leu	Arg	Arg	Asp
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Thr	Ala	Ile	Pro	Phe	Arg	Ser	Arg	Phe	Phe	Asn	Leu	Lys	Leu	Lys	Asn
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Gln	Thr	Ser	Glu	Arg	Ser	Arg	Val	Arg	Ser	Ser	Asn	Gln	Leu	Pro	Arg
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Ser	Asn	Lys	Gln	Leu	Phe	Glu	Leu	Leu	Cys	Tyr	Ala	Glu	Ser	Ile	Asp
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Val	Gly	Val	Gln	Lys	Ile	Leu	Asn	Ala	Arg	Cys	Pro	Leu	Val	Arg	Phe
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Ser	His	Gln	Ala	Ser	Gly	Phe	Gln	Cys	Asp	Leu	Thr	Thr	Asn	Asn	Arg
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Cys	Val	Ile	Glu	Gly	Asn	Asn	Cys	Thr	Phe	Val	Arg	Asp	Leu	Ser	Arg
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Ile	Lys	Pro	Ser	Gln	Asn	Thr	Glu	Thr	Leu	Glu	Leu	Leu	Leu	Lys	Glu
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465					470					475					480
Ile	Arg	Gln	Gly	Arg	Glu	Gln	Asn	Lys	Pro	Asp	Ser	Ser	Pro	Leu	Tyr
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 <212> DNA  
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 35 40 45  
 Glu Asn Gly Gln Arg Lys Tyr Gly Gly Pro Pro Gly Trp Glu Gly  
 50 55 60  
 Pro His Pro Gln Arg Gly Cys Glu Val Phe Val Gly Lys Ile Pro Arg  
 65 70 75 80  
 Asp Val Tyr Glu Asp Glu Leu Val Pro Val Phe Glu Ala Val Gly Arg  
 85 90 95  
 Ile Tyr Glu Leu Arg Leu Met Met Asp Phe Asp Gly Lys Asn Arg Gly  
 100 105 110  
 Tyr Ala Phe Val Met Tyr Cys His Lys His Glu Ala Lys Arg Ala Val  
 115 120 125  
 Arg Glu Leu Asn Asn Tyr Glu Ile Arg Pro Gly Arg Leu Leu Gly Val  
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 Cys Cys Ser Val Asp Asn Cys Arg Leu Phe Ile Gly Gly Ile Pro Lys  
 145 150 155 160  
 Met Lys Lys Arg Glu Glu Ile Leu Glu Glu Ile Ala Lys Val Thr Glu  
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 Gly Val Leu Asp Val Ile Val Tyr Ala Ser Ala Ala Asp Lys Met Lys  
 180 185 190  
 Asn Arg Gly Phe Ala Phe Val Glu Tyr Glu Ser His Arg Ala Ala Ala  
 195 200 205  
 Met Ala Arg Arg Lys Leu Met Pro Gly Arg Ile Gln Leu Trp Gly His  
 210 215 220  
 Gln Ile Ala Val Asp Trp Ala Glu Pro Glu Ile Asp Val Asp Glu Asp  
 225 230 235 240  
 Val Met Glu Thr Val Lys Ile Leu Tyr Val Arg Asn Leu Met Ile Glu  
 245 250 255  
 Thr Thr Glu Asp Thr Ile Lys Lys Ser Phe Gly Gln Phe Asn Pro Gly  
 260 265 270  
 Cys Val Glu Arg Val Lys Lys Ile Arg Asp Tyr Ala Phe Val His Phe  
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 Thr Ser Arg Glu Asp Ala Val His Ala Met Asn Asn Leu Asn Gly Thr  
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 Glu Leu Glu Gly Ser Cys Leu Glu Val Thr Leu Ala Lys Pro Val Asp  
 305 310 315 320  
 Lys Glu Gln Tyr Ser Arg Tyr Gln Lys Ala Ala Arg Gly Gly Gly Ala  
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 Arg Asp Tyr Phe Val Lys Ala Gly Ser Ile Arg Gly Arg Gly Arg Gly  
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 385 390 395 400  
 Tyr Ser Ala Gly Arg Gly Ile Tyr Ser Arg Tyr His Glu Gly Lys Gly  
 405 410 415  
 Lys Gln Gln Glu Lys Gly Tyr Glu Leu Val Pro Asn Leu Glu Ile Pro  
 420 425 430  
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 435 440 445  
 Ile Gly Ala Gln Tyr Ser Met Phe Pro Ala Ala Pro Ala Pro Lys Met  
 450 455 460  
 Ile Glu Asp Gly Lys Ile His Thr Val Glu His Met Ile Ser Pro Ile  
 465 470 475 480  
 Ala Val Gln Pro Asp Pro Ala Ser Ala Ala Ala Ala Ala Ala Ala  
 485 490 495  
 Ala Ala Ala Ala Ala Ala Val Ile Pro Thr Val Ser Thr Pro Pro Pro  
 500 505 510  
 Phe Gln Gly Arg Pro Ile Thr Pro Val Tyr Thr Val Ala Pro Asn Val  
 515 520 525  
 Gln Arg Ile Pro Thr Ala Gly Ile Tyr Gly Ala Ser Tyr Val Pro Phe  
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&lt;210&gt; 5533

&lt;211&gt; 505

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5533

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<212> PRT

<213> Homo sapiens

<400> 5534

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		20						25				30			
Tyr	Arg	Arg	Gly	Leu	Ser	Lys	Tyr	Glu	Ser	Ile	Asp	Glu	Asp	Glu	Leu
	35					40					45				
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Glu	Asp	Ile	Glu	Pro	Asp	Arg	Asn	Leu	Pro	Val	Gly	Leu	Arg	Gln	Lys
65				70					75					80	
Ser	Leu	Thr	Glu	Lys	Thr	Pro	Thr	Gly	Thr	Phe	Ser	Arg	Glu	Ala	Leu
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Met	Ala	Tyr	Trp	Glu	Lys	Glu	Ser	Gln	Lys	Leu	Leu	Glu	Lys	Glu	Arg
			100					105					110		
Leu	Gly	Glu	Cys	Gly	Lys	Val	Ala	Glu	Asp	Lys	Glu	Glu	Ser	Glu	Glu
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Glu	Leu	Ile	Phe	Thr	Glu	Ser	Asn	Ser	Glu	Val	Ser	Glu	Glu	Val	Tyr
	130					135				140					
Thr	Glu	Glu	Glu	Glu	Glu	Glu	Ser	Gln	Glu	Glu	Glu	Glu	Glu	Glu	Asp
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Ser	Asp	Glu	Glu	Glu	Arg	Thr	Ile								
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<210> 5535

<211> 1887

<212> DNA

<213> Homo sapiens

<400> 5535

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 360  
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 420

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1860  
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1887

&lt;210&gt; 5536

&lt;211&gt; 306

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5536

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Thr Ser Leu Thr Ala Asn Pro Asp Ala Thr Thr Val Asn Ile Glu Asp
      20           25           30
Pro Gly Glu Thr Pro Lys His Gln Pro Gly Ser Pro Arg Gly Ser Gly
      35           40           45
Arg Glu Glu Asp Asp Glu Leu Leu Gly Asn Asp Asp Ser Asp Lys Thr
      50           55           60
Glu Leu Leu Ala Gly Gln Lys Lys Ser Ser Pro Phe Trp Thr Phe Glu
65           70           75           80
Tyr Tyr Gln Thr Phe Phe Asp Val Asp Thr Tyr Gln Val Phe Asp Arg
      85           90           95
Ile Lys Gly Ser Leu Leu Pro Ile Pro Gly Lys Asn Phe Val Arg Leu
      100          105          110
Tyr Ile Arg Ser Asn Pro Asp Leu Tyr Gly Pro Phe Trp Ile Cys Ala
      115          120          125
Thr Leu Val Phe Ala Ile Ala Ile Ser Gly Asn Leu Ser Asn Phe Leu
      130          135          140
Ile His Leu Gly Glu Lys Thr Tyr His Tyr Val Pro Glu Phe Arg Lys
145          150          155          160
Val Ser Ile Ala Ala Thr Ile Ile Tyr Ala Tyr Ala Trp Leu Val Pro
      165          170          175
Leu Ala Leu Trp Gly Phe Leu Met Trp Arg Asn Ser Lys Val Met Asn
      180          185          190
Ile Val Ser Tyr Ser Phe Leu Glu Ile Val Cys Val Tyr Gly Tyr Ser
      195          200          205
Leu Phe Ile Tyr Ile Pro Thr Ala Ile Leu Trp Ile Ile Pro Gln Lys
      210          215          220
Ala Val Arg Trp Ile Leu Val Met Ile Ala Leu Gly Ile Ser Gly Ser
225          230          235          240
Leu Leu Ala Met Thr Phe Trp Pro Ala Val Arg Glu Asp Asn Arg Arg
      245          250          255
Val Ala Leu Ala Thr Ile Val Thr Ile Val Leu Leu His Met Leu Leu
      260          265          270
Ser Val Gly Cys Leu Ala Tyr Phe Phe Asp Ala Pro Glu Met Asp His
      275          280          285
Leu Pro Thr Thr Thr Ala Thr Pro Asn Gln Thr Val Ala Ala Ala Lys
      290          295          300
Ser Ser
305

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&lt;210&gt; 5537

&lt;211&gt; 2881

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5537

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120

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 c  
 2881

&lt;210&gt; 5538

&lt;211&gt; 352

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5538

Met Asp Ile Asp Lys Asp Leu Glu Ala Pro Leu Tyr Leu Thr Pro Glu  
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 Gly Trp Ser Leu Phe Leu Gln Arg Tyr Tyr Gln Val Val His Glu Gly  
 20 25 30  
 Ala Glu Leu Arg His Leu Asp Thr Gln Val Gln Arg Cys Glu Asp Ile  
 35 40 45  
 Leu Gln Gln Leu Gln Ala Val Val Pro Gln Ile Asp Met Glu Gly Asp

50	55	60
Arg Asn Ile Trp Ile Val Lys Pro Gly Ala Lys Ser Arg Gly Arg Gly		
65	70	75
Ile Met Cys Met Asp His Leu Glu Glu Met Leu Lys Leu Val Asn Gly		80
	85	90
Asn Pro Val Val Met Lys Asp Gly Lys Trp Val Val Gln Lys Tyr Ile		95
	100	105
Glu Arg Pro Leu Leu Ile Phe Gly Thr Lys Phe Asp Leu Arg Gln Trp		110
	115	120
Phe Leu Val Thr Asp Trp Asn Pro Leu Thr Val Trp Phe Tyr Arg Asp		125
	130	135
Ser Tyr Ile Arg Phe Ser Thr Gln Pro Phe Ser Leu Lys Asn Leu Asp		140
	145	150
Asn Ser Val His Leu Cys Asn Asn Ser Ile Gln Lys His Leu Glu Asn		155
	165	170
Ser Cys His Arg His Pro Leu Leu Pro Pro Asp Asn Met Trp Ser Ser		175
	180	185
Gln Arg Phe Gln Ala His Leu Gln Glu Met Gly Ala Pro Asn Ala Trp		190
	195	200
Ser Thr Ile Ile Val Pro Gly Met Lys Asp Ala Val Ile His Ala Leu		205
	210	215
Gln Thr Ser Gln Asp Thr Val Gln Cys Arg Lys Ala Ser Phe Glu Leu		220
	225	230
Tyr Gly Ala Asp Phe Val Phe Gly Glu Asp Phe Gln Pro Trp Leu Ile		235
	245	250
Glu Ile Asn Ala Ser Pro Thr Met Ala Pro Ser Thr Ala Val Thr Ala		255
	260	265
Arg Leu Cys Ala Gly Val Gln Ala Asp Thr Leu Arg Val Val Ile Asp		270
	275	280
Arg Arg Leu Asp Arg Asn Cys Asp Thr Gly Ala Phe Glu Leu Ile Tyr		285
	290	295
Lys Gln Pro Val Thr Thr Ser Pro Ala Ser Thr Pro Arg Pro Ser Cys		300
	305	310
Leu Leu Pro Met Tyr Ser Asp Thr Arg Ala Arg Ser Ser Asp Asp Ser		315
	325	330
Thr Ala Ser Trp Trp Ala Leu Arg Pro Cys Arg Pro Gln Ala Arg Pro		335
	340	345
		350

&lt;210&gt; 5539

&lt;211&gt; 1887

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5539

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180

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300

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1740  
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1860  
aaaaaaaaaa aaaaaaaaaa aaaaaaa  
1887



<210> 5540  
 <211> 378  
 <212> PRT  
 <213> Homo sapiens

<400> 5540

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      20           25           30
Ala Ala Met Gly Pro Ser Ala Leu Gly Gln Ser Gly Pro Gly Ser Met
      35           40           45
Ala Pro Trp Cys Ser Val Ser Ser Gly Pro Ser Arg Tyr Val Leu Gly
      50           55           60
Met Gln Glu Leu Phe Arg Gly His Ser Lys Thr Arg Glu Phe Leu Ala
65           70           75           80
His Ser Ala Lys Val His Ser Val Ala Trp Ser Cys Asp Gly Arg Arg
      85           90           95
Leu Ala Ser Gly Ser Phe Asp Lys Thr Ala Ser Val Phe Leu Leu Glu
      100          105          110
Arg Thr Gly Trp Ser Lys Lys Thr Ile Ile Gly Asp Met Gly Ile Xaa
      115          120          125
Val Asp Gln Leu Cys Trp His Pro Ser Asn Pro Asp Leu Phe Val Thr
      130          135          140
Ala Ser Gly Asp Lys Thr Ile Arg Ile Trp Asp Val Arg Thr Thr Lys
145          150          155          160
Cys Ile Ala Thr Val Asn Thr Lys Gly Glu Asn Ile Asn Ile Cys Trp
      165          170          175
Ser Pro Asp Gly Gln Thr Ile Ala Val Gly Asn Lys Asp Asp Val Val
      180          185          190
Thr Phe Ile Asp Ala Lys Thr His Arg Ser Lys Ala Glu Glu Gln Phe
      195          200          205
Lys Phe Glu Val Asn Glu Ile Ser Trp Asn Asn Asp Asn Asn Met Phe
      210          215          220
Phe Leu Thr Asn Gly Asn Gly Cys Ile Asn Ile Leu Ser Tyr Pro Glu
225          230          235          240
Leu Lys Pro Val Gln Ser Ile Asn Ala His Pro Ser Asn Cys Ile Cys
      245          250          255
Ile Lys Phe Asp Pro Met Gly Lys Tyr Phe Ala Thr Gly Ser Ala Asp
      260          265          270
Ala Leu Val Ser Leu Trp Asp Val Asp Glu Leu Val Cys Val Arg Cys
      275          280          285
Phe Ser Arg Leu Asp Trp Pro Val Arg Thr Leu Ser Phe Ser His Asp
      290          295          300
Gly Lys Met Leu Ala Ser Ala Ser Glu Asp His Phe Ile Asp Ile Ala
305          310          315          320
Glu Val Glu Thr Gly Asp Lys Leu Trp Glu Val Gln Cys Glu Ser Pro
      325          330          335
Thr Phe Thr Val Ala Trp His Pro Lys Arg Pro Leu Leu Ala Phe Ala
      340          345          350
Cys Asp Asp Lys Asp Gly Lys Tyr Asp Ser Ser Arg Glu Ala Gly Thr
      355          360          365
Val Lys Leu Phe Gly Leu Pro Asn Asp Ser

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370

375

&lt;210&gt; 5541

&lt;211&gt; 1854

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5541

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1380

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<212> PRT

<213> Homo sapiens

<400> 5542

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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&lt;210&gt; 5546

<211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 5546

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			35				40					45			
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	50					55					60				
Gln	Met	Ser	Glu	Arg	Phe	Leu	His	His	Thr	Arg	Thr	Leu	Val	Glu	Met
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Lys	Arg	Asp	Leu	Asp	Ser	Ile	Phe	Arg	Arg	Ile	Arg	Thr	Leu	Lys	Gly
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Thr	Thr	Ile	Ala	Thr	Ser	Glu	Gln	Ser	Thr	Gly	Ser	Cys	Asp	Thr	Ser
	130					135				140					
Pro	Asp	Thr	Val	Ser	Pro	Ser	Leu	Ser	Pro	Gly	Phe	Glu	Asp	Leu	Ser
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<210> 5547  
 <211> 1391  
 <212> DNA  
 <213> Homo sapiens

<400> 5547

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<210> 5548

<211> 167

<212> PRT

<213> Homo sapiens

<400> 5548

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			20					25					30		
Leu	Gln	Thr	Asn	Val	Arg	Ser	Gln	Ile	Leu	Arg	Leu	Arg	His	Thr	Ala
			35				40					45			
Phe	Val	Ile	Pro	Lys	Lys	Asn	Val	Pro	Thr	Ser	Lys	Arg	Glu	Thr	Tyr
	50					55					60				
Thr	Glu	Asp	Phe	Ile	Lys	Gln	Ile	Glu	Glu	Phe	Asn	Ile	Gly	Lys	
65					70				75				80		
Arg	His	Leu	Ala	Asn	Met	Met	Gly	Glu	Asp	Pro	Glu	Thr	Phe	Thr	Gln
				85				90					95		
Glu	Asp	Ile	Asp	Arg	Ala	Ile	Ala	Tyr	Leu	Phe	Pro	Ser	Gly	Leu	Phe
			100					105					110		
Glu	Lys	Arg	Ala	Arg	Pro	Val	Met	Lys	His	Pro	Glu	Gln	Ile	Phe	Pro
			115				120					125			
Arg	Gln	Arg	Ala	Ile	Gln	Trp	Gly	Glu	Asp	Gly	Arg	Pro	Phe	His	Tyr

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Leu Phe Tyr Thr Gly Lys Gln Ser Tyr Tyr Ser	Leu Met His Asp Val	
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	165	

&lt;210&gt; 5549

&lt;211&gt; 1865

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5549

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<211> 242

<212> PRT

<213> Homo sapiens

<400> 5550

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			20					25					30		
Arg	Trp	Ser	Arg	Tyr	Ser	Pro	Glu	Phe	Lys	Asp	Pro	Leu	Ile	Asp	Lys
		35				40					45				
Glu	Tyr	Tyr	Arg	Lys	Pro	Val	Glu	Glu	Leu	Thr	Glu	Glu	Glu	Lys	Tyr
	50				55					60					
Val	Arg	Glu	Leu	Lys	Lys	Thr	Gln	Leu	Ile	Lys	Ala	Ala	Pro	Ala	Gly
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Lys	Thr	Ser	Ser	Val	Phe	Glu	Asp	Pro	Val	Ile	Ser	Lys	Phe	Thr	Asn
			85					90					95		
Met	Met	Met	Ile	Gly	Gly	Asn	Lys	Val	Leu	Ala	Arg	Ser	Leu	Met	Ile
		100					105						110		
Gln	Thr	Leu	Glu	Ala	Val	Lys	Arg	Lys	Gln	Phe	Glu	Lys	Tyr	His	Ala
	115					120					125				
Ala	Ser	Ala	Glu	Glu	Gln	Ala	Thr	Ile	Glu	Arg	Asn	Pro	Tyr	Thr	Ile
	130				135					140					
Phe	His	Gln	Ala	Leu	Lys	Asn	Cys	Glu	Pro	Met	Ile	Gly	Leu	Val	Pro
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			165					170					175		
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Asp	Lys	Lys	His	Gln	Arg	Thr	Leu	Met	Pro	Glu	Lys	Leu	Ser	His	Lys

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Trp	Trp														

&lt;210&gt; 5551

&lt;211&gt; 1689

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5551

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<210> 5552

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5552

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			20					25					30		
Tyr	Leu	Leu	Asp	Pro	Tyr	Val	Asn	Leu	Ala	Pro	Gly	Cys	Arg	Ser	Leu
		35					40					45			
Phe	Ser	Val	Ile	Val	Arg	Val	Val	Gly	Asp	Leu	Met	Leu	Arg	Ile	Gln
		50				55					60				
Arg	Ile	Gln	Asp	Phe	Thr	Pro	Lys	Leu	Leu	Leu	Val	Arg	Lys	Arg	Leu
65					70					75				80	
Leu	Gly	Leu	Glu	Pro	Glu	Gly	Pro	Ile	Ser	Asp	Leu	Glu	Pro	Val	Glu
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<210> 5553

<211> 274

<212> DNA

<213> Homo sapiens

<400> 5553

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<400> 5554  
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35 40 45  
Gly Pro Ala Thr Ala Pro Ala Val Val Leu Ser His Tyr Arg Gly Cys  
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<212> DNA  
<213> Homo sapiens

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<212> PRT  
<213> Homo sapiens

<400> 5556  
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<211> 1970
<212> DNA
<213> Homo sapiens
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&lt;210&gt; 5558

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5558

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Ser	Leu	His	Ser	Tyr	Ser	Phe	Ser	Ser	Lys	His	Thr	Arg	Glu	Arg	Pro
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Ser	Val	Pro	Arg	Glu	Pro	Ile	Asp	Arg	Lys	Arg	Leu	Lys	Lys	Asp	Val
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Glu	Pro	Ser	Cys	Ser	Gly	Ser	Ser	Leu	Gly	Pro	Asp	Lys	Gly	Leu	Ala
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Gln	Ser	Pro	Pro	Ser	Ser	Ser	Leu	Thr	Ala	Thr	Arg	Gln	Lys	Pro	Ser
65					70					75				80	
Gln	Ser	Pro	Ser	Ala	Pro	Pro	Ala	Asp	Val	Thr	Pro	Lys	Pro	Ala	Thr
				85					90					95	
Glu	Ala	Val	Gln	Ser	Glu	His	Ser	Asp	Ala	Ser	Pro	Met	Ser	Ile	Asn
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Glu	Val	Ile	Leu	Ser	Ala	Ser	Gly	Ala	Cys	Lys	Leu	Ile	Asp	Ser	Leu
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His	Ser	Tyr	Cys	Phe	Ser	Ser	Arg	Gln	Asn	Lys	Ser	Gln	Val	Cys	Cys

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Gln Arg Val Ser Arg	Ser Asp Ser Gln Val Arg	Lys Leu Gln Glu Lys		
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Leu Asp Glu Leu Arg	Arg Val Ser Val Pro Tyr	Pro Ser Ser Leu Leu		
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Ser Pro Ser Arg Glu	Pro Pro Lys Met Asn Pro	Val Val Glu Pro Leu		
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Ser Trp Met Leu Gly	Thr Trp Leu Ser Asp Pro	Pro Gly Ala Gly Thr		
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Tyr Pro Thr Leu Gln	Pro Phe Gln Tyr Leu Glu	Glu Val His Ile Ser		
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His Val Gly Gln Pro	Met Leu Asn Phe Ser Phe	Asn Ser Phe His Pro		
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Gln Ile Thr Arg Lys	Phe Arg Leu Asn Ser Glu	Gly Lys Leu Glu Gln		
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&lt;210&gt; 5559

&lt;211&gt; 3866

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5559

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<210> 5560  
 <211> 1165  
 <212> PRT  
 <213> Homo sapiens

<400> 5560  
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 Asn Gly Thr Tyr Gly Gln Val Tyr Lys Gly Arg His Val Lys Thr Gly  
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 Gln Leu Ala Ala Ile Lys Val Met Asp Val Thr Glu Asp Glu Glu Glu  
 50 55 60  
 Glu Ile Lys Leu Glu Ile Asn Met Leu Lys Lys Tyr Ser His His Arg  
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 Asn Ile Ala Thr Tyr Tyr Gly Ala Phe Ile Lys Lys Ser Pro Pro Gly  
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 His Asp Asp Gln Leu Trp Leu Val Met Glu Phe Cys Gly Ala Gly Ser  
 100 105 110  
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 His Ile His His Val Ile His Arg Asp Ile Lys Gly Gln Asn Val Leu  
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 Glu Met Ala Glu Gly Ala Pro Pro Leu Cys Asp Met His Pro Met Arg  
 225 230 235 240  
 Ala Leu Phe Leu Ile Pro Arg Asn Pro Pro Arg Leu Lys Ser Lys  
 245 250 255  
 Lys Trp Ser Lys Lys Phe Ile Asp Phe Ile Asp Thr Cys Leu Ile Lys  
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 Thr Tyr Met Gln Arg Pro Thr Thr Glu Gln Leu Leu Lys Phe Pro Phe  
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 Ile Arg Asp Gln Pro Thr Glu Arg Gln Val Arg Ile Gln Leu Lys Asp  
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 His Ile Asp Arg Thr Arg Lys Lys Arg Gly Glu Lys Glu Glu Thr Glu  
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Glu	Tyr	Lys	Arg	Gln	Leu	Leu	Ala	Glu	Arg	Gln	Lys	Arg	Ile	Glu	Gln										
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Arg	Leu	Leu	Trp	Glu	Arg	Val	Glu	Lys	Leu	Val	Pro	Arg	Pro	Gly	Ser										
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Thr Pro Glu Ile Arg Lys Tyr Lys Lys Arg Phe Asn Ser Glu Ile Leu				
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Cys Ala Ala Leu Trp Gly Val Asn Leu Leu Val Gly Thr Glu Ser Gly				
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Ser Trp Leu Arg Asn Lys Ile Leu His Asn Asp Pro Glu Val Glu Lys				
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Cys Ala Gly Phe His Ala Val Asp Val Asp Ser Gly Ser Val Tyr Asp				
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&lt;210&gt; 5561

&lt;211&gt; 2089

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5561

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&lt;210&gt; 5562

&lt;211&gt; 372

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5562

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			20					25					30		
Asp	Ser	Asn	Met	Lys	Arg	Glu	Gln	Pro	Arg	Glu	Arg	Pro	Arg	Ala	Trp
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Asp	Tyr	Pro	His	Gly	Leu	Val	Gly	Leu	His	Asn	Ile	Gly	Gln	Thr	Cys
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Cys	Leu	Asn	Ser	Leu	Ile	Gln	Val	Phe	Val	Met	Asn	Val	Asp	Phe	Thr
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Arg	Ile	Leu	Lys	Arg	Ile	Thr	Val	Pro	Arg	Gly	Ala	Asp	Glu	Gln	Arg
			85					90					95		
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Ile	Cys	Val	Asp	Cys	Ala	Met	Glu	Ser	Ser	Arg	Asn	Ser	Ser	Met	Leu
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Thr	Leu	Pro	Leu	Ser	Leu	Phe	Asp	Val	Asp	Ser	Lys	Pro	Leu	Lys	Thr
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225                                      230                                      235                                      240  
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    260                                      265                                      270  
 Leu Tyr Phe Pro Gln Ser Leu Asp Phe Ser Gln Ile Leu Pro Met Lys  
    275                                      280                                      285  
 Arg Glu Ser Cys Asp Ala Glu Glu Gln Ser Gly Gly Gln Tyr Glu Leu  
    290                                      295                                      300  
 Phe Ala Val Ile Ala His Val Gly Met Ala Asp Ser Gly His Tyr Cys  
 305                                      310                                      315                                      320  
 Val Tyr Ile Arg Asn Ala Val Asp Gly Lys Trp Phe Cys Phe Asn Asp  
    325                                      330                                      335  
 Ser Asn Ile Cys Leu Val Ser Trp Glu Asp Ile Gln Cys Thr Tyr Gly  
    340                                      345                                      350  
 Asn Pro Asn Tyr His Trp Gln Glu Thr Ala Tyr Leu Leu Val Tyr Met  
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<210> 5563

<211> 2878

<212> DNA

<213> Homo sapiens

<400> 5563

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<210> 5564

<211> 683

<212> PRT

<213> Homo sapiens

<400> 5564

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			20					25					30		
Ser	Ala	Glu	Arg	Ala	Leu	Glu	Glu	Ala	Val	Ala	Thr	Gly	Thr	Leu	Asn
			35					40					45		
Leu	Ser	Asn	Arg	Arg	Leu	Lys	His	Phe	Pro	Arg	Gly	Ala	Ala	Arg	Ser
			50					55					60		
Tyr	Asp	Leu	Ser	Asp	Ile	Thr	Gln	Ala	Asp	Leu	Ser	Arg	Asn	Arg	Phe
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Pro	Glu	Val	Pro	Glu	Ala	Ala	Cys	Gln	Leu	Val	Ser	Leu	Glu	Gly	Leu
				85						90				95	
Ser	Leu	Tyr	His	Asn	Cys	Leu	Arg	Cys	Leu	Asn	Pro	Ala	Leu	Gly	Asn
			100					105					110		
Leu	Thr	Ala	Leu	Thr	Tyr	Leu	Asn	Leu	Ser	Arg	Asn	Gln	Leu	Ser	Leu
			115					120					125		
Leu	Pro	Pro	Tyr	Ile	Cys	Gln	Leu	Pro	Leu	Arg	Val	Leu	Ile	Val	Ser
			130					135					140		
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Leu	Arg	Gln	Leu	Asp	Val	Ser	Ser	Asn	Glu	Leu	Gln	Ser	Leu	Pro	Ser
				165						170				175	
Glu	Leu	Cys	Gly	Leu	Ser	Ser	Leu	Arg	Asp	Leu	Asn	Val	Arg	Arg	Asn
			180					185					190		
Gln	Leu	Ser	Thr	Leu	Pro	Glu	Glu	Leu	Gly	Asp	Leu	Pro	Leu	Val	Arg
			195					200					205		
Leu	Asp	Phe	Ser	Cys	Asn	Arg	Val	Ser	Arg	Ile	Pro	Val	Ser	Phe	Cys
			210					215					220		
Arg	Leu	Arg	His	Leu	Gln	Val	Ile	Leu	Leu	Asp	Ser	Asn	Pro	Leu	Gln
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Ser	Pro	Pro	Ala	Gln	Val	Cys	Leu	Lys	Gly	Lys	Leu	His	Ile	Phe	Lys
				245						250				255	
Tyr	Leu	Ser	Thr	Glu	Ala	Gly	Gln	Arg	Gly	Ser	Ala	Leu	Gly	Asp	Leu

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Ala	Pro	Ser	Arg	Pro	Pro
	275		280		285
Phe	Pro	Gly	His	Arg	Tyr
	290		295		300
Val	Asp	Ser	Gly	Ser	Lys
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Phe	Ser	Glu	Leu	Ser	Phe
	325		330		335
Gly	Pro	Arg	Glu	Arg	Lys
	340		345		350
Gln	Ile	Asp	Phe	Ile	Asp
	355		360		365
Gly	Thr	Val	Glu	Glu	Gln
370			375		380
Asp	Arg	Glu	Arg	Ala	Pro
385			390		395
Glu	Arg	Arg	Arg	Pro	Asp
	405		410		415
Arg	Gln	Gln	Gln	Ser	Gly
	420		425		430
Leu	Leu	Lys	Pro	Gly	Leu
	435		440		445
Ser	Thr	Gln	Ala	Met	His
450			455		460
Ala	Gly	Gly	Cys	Ser	Gly
465			470		475
Gln	Glu	Pro	Leu	Pro	Ile
	485		490		495
Pro	Leu	Gly	Ser	Ile	Gln
	500		505		510
Ser	Gln	Ser	Gly	Ser	Gly
	515		520		525
Arg	Arg	Tyr	Pro	Gln	Val
530			535		540
Arg	Gln	Val	Leu	Glu	Ser
545			550		555
Ala	Glu	Ala	Leu	Ala	Ser
	565		570		575
Leu	Arg	Pro	Arg	Ser	Val
	580		585		590
Pro	Lys	Leu	Ser	Ala	Leu
	595		600		605
Glu	Ala	Cys	Arg	Lys	Met
610			615		620
Ser	Asp	Leu	Leu	Gln	Gly
625			630		635
Ala	Val	Lys	Arg	Val	Gly
	645		650		655
Ser	Gly	Leu	Gly	Phe	Val
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Leu	Tyr	Val	Thr	Tyr	Thr
	675		680		

<210> 5565  
 <211> 472  
 <212> DNA  
 <213> Homo sapiens

<400> 5565  
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<210> 5566  
 <211> 76  
 <212> PRT  
 <213> Homo sapiens

<400> 5566  
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<210> 5567  
 <211> 968  
 <212> DNA  
 <213> Homo sapiens

<400> 5567  
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<210> 5568

<211> 130

<212> PRT

<213> Homo sapiens

<400> 5568

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			20					25				30			
His	Arg	Ser	Ile	His	Leu	Ala	Pro	Leu	Gln	Ile	Trp	Val	Leu	Cys	Lys
		35					40				45				
Ile	Leu	Pro	Trp	Asp	Thr	Glu	Gly	Lys	Ser	Asp	Thr	Ala	Leu	Leu	Ser
		50				55				60					
Ser	Ser	Gln	Thr	Leu	Arg	Tyr	Pro	Asp	Thr	Thr	Ala	Leu	Ile	Val	Ser
65					70				75					80	
Glu	Asn	Thr	Ala	Thr	Ser	Ala	Gly	Lys	Tyr	Gln	Arg	Cys	Phe	Thr	Arg
			85					90					95		
Tyr	Met	Tyr	Gln	Ile	Leu	Lys	Ala	Ala	Val	Pro	Lys	Tyr	His	Lys	Leu
			100					105					110		
His	Gly	Leu	Lys	Gln	Gln	Lys	Phe	Ile	Pro	Ser	Gln	Ser	Trp	Arg	Pro
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Asp	Val														
			130												

<210> 5569

<211> 876

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5569

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&lt;210&gt; 5570

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5570

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Gly Ser Pro Leu Val Val Ile Ser Gln Gly Lys Ile Val Phe Glu Asp
35           40           45
Gly Asn Ile Asn Val Asn Lys Gly Met Gly Arg Phe Ile Pro Arg Lys
50           55           60
Ala Phe Pro Glu His Ser Ser Thr Trp Leu Glu Leu His Asn His Gly
65           70           75           80
Arg Arg His Val Cys Glu Ala Ser Trp Gly Cys Thr Ala Asp Pro Leu
85           90           95
Leu Ser Pro Leu Ala Leu Ser Ala Ala Phe Met Trp Leu Ser Pro Ser

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	115		120		125										
Gly	Thr	Leu	Ala	Lys	Met	Gln	Cys	Leu	Pro	Asn	Ser	His	Ile	Ser	Phe
	130		135		140										
Asn	Gln	Gly	Ala	Ile	Pro	Ala	Trp	Lys	Ser	Pro	Ser	Cys	Ser	Cys	Trp
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Gln	Val	Gln	Val	Pro	Val	Cys	Asp	Gly							
			165												

&lt;210&gt; 5571

&lt;211&gt; 405

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5571

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&lt;210&gt; 5572

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5572

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			20					25				30			
Gln	Leu	Arg	Asp	Pro	Thr	Ser	Pro	Lys	Phe	Pro	Glu	Asp	Phe	Asp	Asp
	35						40				45				
Gly	Glu	His	Ala	Lys	Gln	Lys	Ser	Val	Ile	Ser	Trp	Leu	Leu	Asn	His
	50					55				60					
Asp	Pro	Ala	Lys	Arg	Pro	Thr	Ala	Thr	Glu	Leu	Leu	Lys	Ser	Glu	Leu
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Leu	Pro	Pro	Pro	Gln	Met	Glu	Glu	Ser	Glu	Leu	His	Glu	Val	Leu	His
			85					90				95			
His	Thr	Leu	Thr	Asn	Val	Asp	Gly	Lys	Ala	Tyr	Arg	Thr	Met	Met	Ala
		100					105					110			
Gln	Ile	Phe	Ser	Gln	Arg	Leu	Ala	Gly	Ala	Gly	Gly	Gly	Gly	Tyr	Arg
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<211> 312  
 <212> PRT  
 <213> Homo sapiens

<400> 5574

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Tyr Arg Leu Leu Gly Arg Met Phe Arg Arg Asp Glu Asn Arg Lys Val
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Ala Leu Val Gly Leu Thr Ala Glu Thr Ser His Ala Leu Val Pro Lys
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Glu Ile Pro Gly Lys Gly Gly Ile Trp Arg Val Ile Phe Lys Pro Pro
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      115          120          125
Gly Ser Leu Asp Pro Glu Gln Gly Met Ile Pro Glu Met Trp Ala Pro
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Met Leu Ala Gln Ala Leu Glu Ala Leu Gln Pro Ala Leu Gln Cys Leu
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      165          170          175
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      180          185          190
Lys Ala Trp Gln Val Pro Asp Val Glu Lys Arg Arg Arg Leu Leu Glu
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Ser Leu Arg Gly Pro Ala Leu Asp Val Ile Arg Val Leu Lys Ile Asn
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      260          265          270
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<400> 5575

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 85 90 95  
 Lys Thr Ala Ser Lys Leu Cys Ser Ala Leu Thr Leu Ser Gly Leu Val  
 100 105 110  
 Glu Val Lys Glu Leu Gln Arg Glu Pro Leu Thr Pro Glu Glu Val Gln  
 115 120 125  
 Ser Val Arg Glu His Leu Gly His Glu Ser Asp Asn Leu Leu Phe Val  
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Trp	Pro	Leu	Glu	His	Val	Val	Arg	Leu	Asn	Met	Met	Ile	Asn	Gln	Lys	
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Glu	Ala	Cys	Ser	His	Phe	Ser	Phe	Ser	Leu	Ala	Glu	Thr	Thr	Thr	Val	
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Ser	Leu	Ile	Ala	Leu	Asn	Thr	Leu	Gln	Asp	Leu	Ile	Asp	Ser	Asp	Glu	
			260					265					270			
Leu	Leu	Asp	Pro	Glu	Asp	Leu	Lys	Lys	Pro	Asp	Pro	Ala	Ser	Leu	Arg	
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Ala	Ala	Ser	Cys	Gly	Asp	Gly	Lys	Lys	Arg	Lys	Ala	Cys	Lys	Asn	Cys	
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Thr	Cys	Gly	Leu	Ala	Glu	Glu	Leu	Glu	Lys	Glu	Lys	Ser	Arg	Glu	Gln	
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Met	Ser	Ser	Gln	Pro	Lys	Ser	Ala	Cys	Gly	Asn	Cys	Tyr	Leu	Gly	Asp	
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Ala	Phe	Arg	Cys	Ala	Ser	Cys	Pro	Tyr	Leu	Gly	Met	Pro	Ala	Phe	Lys	
			340					345					350			
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<212> DNA
<213> Homo sapiens
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<210> 5578  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 5578  
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 Xaa Glu Ser Leu Pro Glu Gln Leu Pro Val Ala Asp Met Arg Ala Leu  
 35 40 45  
 Leu Thr Gly Lys Asp Cys Pro His Val Arg Glu Lys Gly Ser Gly Lys  
 50 55 60  
 Gln Asn Lys Asp Leu Tyr Glu Leu Ala Phe Ser Ile Ser Tyr Asp Arg  
 65 70 75 80  
 Gly Glu Glu Glu Ala Tyr Leu Asn Phe Ile Ala Pro Ser Lys Arg Glu  
 85 90 95  
 Phe Tyr Leu Trp Thr Asp Gly Leu Ser Ala Leu Leu Gly Ser Pro Met  
 100 105 110  
 Gly Ser Glu Gln Thr Arg Leu Asp Leu Glu Gln Leu Leu Thr Met Glu  
 115 120 125  
 Thr Lys Leu Arg Leu Leu Glu Leu Glu Asn Val Pro Ile Pro Glu Arg  
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<210> 5579  
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<212> PRT

<213> Homo sapiens

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Ser	Gly	Pro	Ser	Gln	Thr	Thr	Ile	His	Leu	Leu	Pro	Thr	Ala	Pro	Thr
			35				40					45			
Thr	Val	Asn	Val	Thr	His	Arg	Pro	Val	Thr	Gln	Val	Thr	Thr	Arg	Leu
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				85					90					95	
Pro	Ala	Val	Arg	Gln	Val	Asn	Pro	Gln	Asn	Ser	Val	Thr	Val	Arg	Val
			100					105					110		
Pro	Gln	Thr	Thr	Thr	Tyr	Val	Val	Asn	Asn	Gly	Leu	Thr	Leu	Gly	Ser
			115				120					125			
Thr	Gly	Pro	Gln	Leu	Thr	Val	His	His	Arg	Pro	Pro	Gln	Val	His	Thr
			130			135					140				
Glu	Pro	Pro	Arg	Pro	Val	His	Pro	Ala	Pro	Leu	Pro	Glu	Ala	Pro	Gln
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Cys	Pro	Gln	Asp	Lys	Ser	Glu	Thr	Ile	Asn	Pro	Lys	Thr	Cys	Ser	Pro		
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			165					170					175				
Ser	Asp	Asp	Ser	Ser	Leu	Ser	Trp	Tyr	His	Gln	Val	Val	Leu	Gln	Met		
			180					185					190				
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<212> DNA
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600

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1560  
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1620  
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1680  
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1740  
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1800  
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2100  
a  
2101

&lt;210&gt; 5584

&lt;211&gt; 454

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5584

```

Xaa Gly Arg Asp Cys Val Leu Leu Gln Glu Asp Phe Leu Ala His Arg
 1           5           10           15
Gly Arg Pro His Val Tyr Leu Gln Arg Ile Gln Leu Asn Asn Pro Thr
      20           25           30
Glu Arg Val Ala Ala Leu Gln Thr Val Gly Pro Thr Ala Gly Pro Ala
      35           40           45
Pro Asn Ala Phe Thr Ser Thr Leu Glu Lys Val Gly Asp His Gln Phe
      50           55           60
Leu Leu Tyr Ser Gly Arg Ser Pro Pro Thr Pro Thr Gly Leu Val His
      65           70           75           80
Leu Val Val Val Ala Ala Lys Lys Leu Val Asn Arg Leu Gln Val Ala
      85           90           95
Pro Lys Thr Gln Leu Asp Glu Thr Val Leu Trp Val Val His Val Ser
      100          105          110
Gly Pro Ile Asn Pro Gln Val Leu Lys Ser Lys Ala Ala Lys Glu Leu
      115          120          125
Lys Ala Leu Gln Asp Leu Ala Arg Lys Glu Met Leu Glu Leu Leu Asp
      130          135          140
Met Pro Ala Ala Glu Leu Leu Gln Asp His Gln Leu Leu Trp Ala Gln
      145          150          155          160
Leu Phe Ser Pro Gly Val Glu Met Lys Lys Ile Thr Asp Thr His Thr
      165          170          175
Pro Ser Gly Leu Thr Val Asn Leu Thr Leu Tyr Tyr Met Leu Ser Cys
      180          185          190
Ser Pro Ala Pro Leu Leu Ser Pro Ser Leu Ser His Arg Glu Arg Asp
      195          200          205
Gln Met Glu Ser Thr Leu Asn Tyr Glu Asp His Cys Phe Ser Gly His
      210          215          220
Ala Thr Met His Ala Glu Asn Leu Trp Pro Gly Arg Leu Ser Ser Val
      225          230          235          240
Gln Gln Ile Leu Gln Leu Ser Asp Leu Trp Arg Leu Thr Leu Gln Lys
      245          250          255
Arg Gly Cys Lys Gly Leu Val Lys Val Gly Ala Pro Gly Ile Leu Gln
      260          265          270
Gly Met Val Leu Ser Phe Gly Gly Leu Gln Phe Thr Glu Asn His Leu
      275          280          285
Gln Phe Gln Ala Asp Pro Asp Val Leu His Asn Ser Tyr Ala Leu His
      290          295          300
Gly Ile Arg Tyr Lys Asn Asp His Ile Asn Leu Ala Val Leu Arg Met
      305          310          315          320
Pro Arg Ala Ser Pro Thr Tyr Thr Cys Pro Trp Ser Pro Val Ala Ser
      325          330          335
Leu Ser Xaa Ile Tyr Ala Cys Lys Ala Gly Cys Leu Asp Glu Pro Val
      340          345          350
Glu Leu Thr Ser Ala Pro Thr Gly His Thr Phe Ser Val Met Val Thr
      355          360          365
Gln Pro Ile Thr Pro Leu Leu Tyr Ile Ser Thr Asp Leu Thr His Leu
      370          375          380
Gln Asp Leu Arg His Thr Leu His Leu Lys Ala Ile Leu Ala His Asp

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385          390          395          400
Glu His Met Ala Gln Gln Asp Pro Gly Leu Pro Phe Leu Phe Trp Phe
          405          410          415
Ser Val Ala Ser Leu Ile Thr Leu Phe His Leu Phe Leu Phe Lys Leu
          420          425          430
Ile Tyr Asn Glu Tyr Cys Gly Pro Gly Ala Lys Pro Leu Phe Arg Ser
          435          440          445
Lys Glu Asp Pro Ser Val
          450

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&lt;210&gt; 5585

&lt;211&gt; 740

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5585

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tacacatcca aaggcccagc atctcagaaa aatcattagg cggcacacct gtaccagagt
120
ctcacaagaa taaaatatac aatgctacat tgagtgggta aaaatacaca aaaaagtagt
180
tttaacaatc tataaatttt ttatacttaa aatcatgatt gagttgaaat aaaaaagtcg
240
atttcaattg ctaaaaaaat aatatcggta tagttaacac aagggggaaa tcagtacatt
300
gagggatctg acaggatgct ggaaaaaatg actcagggaa gccgggcagc atgggctcct
360
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480
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gtctacttga ccttcaattg cgtctccgca gagaggtagg agaggacac tgccccattc
600
tggacttgac ataagtaccc cagccacatg gccttcatcc ttatgaccta gcaggcagaa
660
cagggaccaa gcagcttcta ttttgtcaaa ctcttttgga caaatattca acattcaaca
720
acaagctttg taaacctaac
740

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&lt;210&gt; 5586

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5586

```

Met Gly Ser Phe Gly Asp Ser Gly Ala Glu Leu Ser Ser Thr Ser Leu
1          5          10          15
Gln Phe Pro Gly Ala Lys Gln Pro Ser Pro Gln Tyr Leu Ser His
          20          25          30
Leu Lys Arg Ser Cys Pro Thr Tyr Leu Ser Pro Pro Gln Pro Lys Asp

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				20					25					30		
Leu	Met	Asn	Leu	Thr	Arg	Ile	Arg	Ser	Thr	Gln	Phe	Lys	Asn	Ser	Met	
		35					40					45				
Ile	Pro	Thr	Gly	Leu	Ala	Trp	Glu	Asp	Met	Leu	Tyr	Pro	Leu	Tyr	Gln	
	50					55					60					
Lys	Tyr	Lys	Asn	Ala	Ile	Thr	Trp	Gly	Asp	Gln	Asp	Leu	Leu	Asn	Ile	
65					70					75					80	
Ile	Phe	Tyr	Phe	Asn	Pro	Glu	Cys	Leu	Tyr	Val	Phe	Pro	Cys	Gln	Trp	
				85					90					95		
Asn	Tyr	Arg	Pro	Asp	His	Cys	Met	Tyr	Gly	Ser	Asn	Cys	Arg	Glu	Ala	
			100					105					110			
Glu	His	Glu	Gly	Val	Ser	Val	Leu	His	Gly	Asn	Arg	Gly	Val	Tyr	His	
			115				120					125				
Asp	Asp	Lys	Gln	Pro	Thr	Phe	Arg	Ala	Leu	Tyr	Glu	Ala	Ile	Arg	Asp	
	130					135					140					
Phe	Pro	Phe	Gln	Asp	Asn	Leu	Phe	Gln	Ser	Met	Tyr	Tyr	Pro	Leu	Gln	
145					150					155					160	
Leu	Lys	Phe	Leu	Glu	Thr	Val	His	Thr	Leu	Cys	Gly	Arg	Ile	Pro	Gln	
				165					170					175		
Val	Phe	Leu	Lys	Gln	Ile	Glu	Lys	Thr	Met	Lys	Arg	Ala	Tyr	Glu	Lys	
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His	Val	Ile	Ile	His	Val	Gly	Pro	Asn	Gln	Met	His					
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<210> 5589

<211> 1327

<212> DNA

<213> Homo sapiens

<400> 5589

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120
gataacttca ccaagatgtc cagtgatagg caaagggtccg atgatgagag cccagcacc
180
agcagtggca gttcagatgc ggaccagcga gaccagccg ctccagagcc tgaagaacaa
240
gaggaaagaa aaccttctgc caccagcag aagaaaaaca ccaaactctc tagcaaaacc
300
actgctaagt tatccactag tgctaaaaga attcagaagg agctagctga aataaccctt
360
gatcctctc ctaattgcag tgctgggcct aaaggagata acatttatga atggagatca
420
actatacttg gtccaccggg ttctgtatat gaaggtggtg tgttttttct ggatatcaca
480
ttttcatcag attatccatt taagccacca aaggttactt tccgcaccag aatctatcac
540
tgcaacatca acagtcaggg agtcatctgt ctggacatcc ttaaagacaa ctggagtcce
600
gctttgacta tttcaaagg tttgctgtct atttgttccc ttttgacaga ctgcaaccct
660
gcggatcctc tggttggaag catagccact cagtatttga ccaacagagc agaacacgac
720

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aggatagcca gacagtggac caagagatac gcaacataat tcacataatt tgtatgcagt  
 780  
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 840  
 gacttctgtg tatatgttat actgattcta ctctgctttt atccttttga gcctgggaga  
 900  
 ctccccaaaa aggtaaatgc tatcaagagt agaactttgt agctgtagat tagttatggt  
 960  
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 1020  
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 1080  
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 1140  
 cagatctatt tctgagtatg tgggtcatgc tgttggtgaaa aatgttttac cttttacctt  
 1200  
 tgtcagtttg taatgagagg atttcctttt acccttttga gctcagagag cacctgatgt  
 1260  
 atcatctcaa acacaataaa catgctcctg aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
 1320  
 aaaaaaa  
 1327

<210> 5590

<211> 207

<212> PRT

<213> Homo sapiens

<400> 5590

Met	Ser	Ser	Asp	Arg	Gln	Arg	Ser	Asp	Asp	Glu	Ser	Pro	Ser	Thr	Ser
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Ser	Gly	Ser	Ser	Asp	Ala	Asp	Gln	Arg	Asp	Pro	Ala	Ala	Pro	Glu	Pro
			20					25					30		
Glu	Glu	Gln	Glu	Glu	Arg	Lys	Pro	Ser	Ala	Thr	Gln	Gln	Lys	Lys	Asn
			35				40					45			
Thr	Lys	Leu	Ser	Ser	Lys	Thr	Thr	Ala	Lys	Leu	Ser	Thr	Ser	Ala	Lys
			50				55				60				
Arg	Ile	Gln	Lys	Glu	Leu	Ala	Glu	Ile	Thr	Leu	Asp	Pro	Pro	Pro	Asn
65					70				75						80
Cys	Ser	Ala	Gly	Pro	Lys	Gly	Asp	Asn	Ile	Tyr	Glu	Trp	Arg	Ser	Thr
				85				90					95		
Ile	Leu	Gly	Pro	Pro	Gly	Ser	Val	Tyr	Glu	Gly	Gly	Val	Phe	Phe	Leu
			100				105						110		
Asp	Ile	Thr	Phe	Ser	Ser	Asp	Tyr	Pro	Phe	Lys	Pro	Pro	Lys	Val	Thr
			115				120					125			
Phe	Arg	Thr	Arg	Ile	Tyr	His	Cys	Asn	Ile	Asn	Ser	Gln	Gly	Val	Ile
			130				135				140				
Cys	Leu	Asp	Ile	Leu	Lys	Asp	Asn	Trp	Ser	Pro	Ala	Leu	Thr	Ile	Ser
145					150				155						160
Lys	Val	Leu	Leu	Ser	Ile	Cys	Ser	Leu	Leu	Thr	Asp	Cys	Asn	Pro	Ala
				165					170					175	
Asp	Pro	Leu	Val	Gly	Ser	Ile	Ala	Thr	Gln	Tyr	Leu	Thr	Asn	Arg	Ala
			180					185					190		
Glu	His	Asp	Arg	Ile	Ala	Arg	Gln	Trp	Thr	Lys	Arg	Tyr	Ala	Thr	

195

200

205

&lt;210&gt; 5591

&lt;211&gt; 2194

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5591

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120  
gacgtagccg ccacattcca gttccgcacg cgttgggatt cggatctgca gcgggaagga  
180  
gtgtccatt acaggctctt ccctaaagcc ctgggacagc tgatctccaa gtattctcta  
240  
cgggagctcc acctgtcatt cacgcaaggc ttttggagga cccgatactg ggggccaccc  
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360  
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420  
aacttcacg actccaccaa cacagtcact cccactgcct ccttcaaacc cctgggtctg  
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720  
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780  
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840  
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900  
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960  
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1020  
aagtgaaga gacccccaga gaatgaggcc ccccagtg ccttctgca tgcccagcg  
1080  
tacgtgagt gctatgggt gcagaaggg gagctgagca cactgctgta caacaccac  
1140  
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1200  
gtgcacaccc tcaccatcac ctccaaggc aaggagaaca aaccaagta catccactac  
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1380

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 1920  
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 2100  
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 2160  
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 2194

&lt;210&gt; 5592

&lt;211&gt; 580

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5592

Met Pro Ser Gly Ser Ala Arg Pro Val Ala Pro Gly Ala Arg Arg Leu  
 1 5 10 15  
 Val Pro Cys Arg Thr Pro Thr Arg Gln Leu Arg Glu Glu Leu Val Ile  
 20 25 30  
 Thr Pro Leu Pro Ser Gly Asp Val Ala Ala Thr Phe Gln Phe Arg Thr  
 35 40 45  
 Arg Trp Asp Ser Asp Leu Gln Arg Glu Gly Val Ser His Tyr Arg Leu  
 50 55 60  
 Phe Pro Lys Ala Leu Gly Gln Leu Ile Ser Lys Tyr Ser Leu Arg Glu  
 65 70 75 80  
 Leu His Leu Ser Phe Thr Gln Gly Phe Trp Arg Thr Arg Tyr Trp Gly  
 85 90 95Pro Phe Leu  
 Gln Ala Pro Ser Gly Ala Glu Leu Trp Val Trp Phe  
 100 105 110  
 Gln Asp Thr Val Thr Asp Val Asp Lys Ser Trp Arg Glu Leu Ser Asn  
 115 120 125  
 Val Leu Ser Gly Ile Phe Cys Ala Ser Leu Asn Phe Ile Asp Ser Thr  
 130 135 140  
 Asn Thr Val Thr Pro Thr Ala Ser Phe Lys Pro Leu Gly Leu Ala Asn

145					150					155					160
Asp	Thr	Asp	His	Tyr	Phe	Leu	Arg	Tyr	Ala	Val	Leu	Pro	Arg	Glu	Val
					165				170					175	
Val	Cys	Thr	Glu	Asn	Leu	Thr	Pro	Trp	Lys	Lys	Leu	Leu	Pro	Cys	Ser
					180				185					190	
Ser	Lys	Ala	Gly	Leu	Ser	Val	Leu	Leu	Lys	Ala	Asp	Arg	Leu	Phe	His
					195				200					205	
Thr	Ser	Tyr	His	Ser	Gln	Ala	Val	His	Ile	Arg	Pro	Val	Cys	Arg	Asn
					210				215					220	
Ala	Arg	Cys	Thr	Ser	Ile	Ser	Trp	Glu	Leu	Arg	Gln	Thr	Leu	Ser	Val
					225									230	
Val	Phe	Asp	Ala	Phe	Ile	Thr	Gly	Gln	Gly	Lys	Lys	Asp	Trp	Ser	Leu
					235									240	
					245				250					255	
Phe	Arg	Met	Phe	Ser	Arg	Thr	Leu	Thr	Glu	Pro	Cys	Pro	Leu	Ala	Ser
					260				265					270	
Glu	Ser	Arg	Val	Tyr	Val	Asp	Ile	Thr	Thr	Tyr	Asn	Gln	Pro	Cys	Leu
					275				280					285	
Cys	Val	Gln	Asp	Asn	Glu	Thr	Leu	Glu	Val	His	Pro	Pro	Pro	Thr	Thr
					290									295	
Thr	Tyr	Gln	Asp	Val	Ile	Leu	Gly	Thr	Arg	Lys	Thr	Tyr	Ala	Ile	Tyr
					305									310	
Asp	Leu	Leu	Asp	Thr	Ala	Met	Ile	Asn	Asn	Ser	Arg	Asn	Leu	Asn	Ile
					315									320	
					325				330					335	
Gln	Leu	Lys	Trp	Lys	Arg	Pro	Pro	Glu	Asn	Glu	Ala	Pro	Pro	Val	Pro
					340				345					350	
Phe	Leu	His	Ala	Gln	Arg	Tyr	Val	Ser	Gly	Tyr	Gly	Leu	Gln	Lys	Gly
					355				360					365	
Glu	Leu	Ser	Thr	Leu	Leu	Tyr	Asn	Thr	His	Pro	Tyr	Arg	Ala	Phe	Pro
					370				375					380	
Val	Leu	Leu	Leu	Asp	Thr	Val	Pro	Trp	Tyr	Leu	Arg	Leu	Tyr	Val	His
					385									390	
Thr	Leu	Thr	Ile	Thr	Ser	Lys	Gly	Lys	Glu	Asn	Lys	Pro	Ser	Tyr	Ile
					405				410					415	
His	Tyr	Gln	Pro	Ala	Gln	Asp	Arg	Leu	Gln	Pro	His	Leu	Leu	Glu	Met
					420				425					430	
Leu	Ile	Gln	Leu	Pro	Ala	Asn	Ser	Val	Thr	Lys	Val	Ser	Ile	Gln	Phe
					435				440					445	
Glu	Arg	Ala	Leu	Leu	Lys	Trp	Thr	Glu	Tyr	Thr	Pro	Asp	Pro	Asn	His
					450				455					460	
Gly	Phe	Tyr	Val	Ser	Pro	Ser	Val	Leu	Ser	Ala	Leu	Val	Pro	Ser	Met
					465				470					475	
Val	Ala	Ala	Lys	Pro	Val	Asp	Trp	Glu	Glu	Ser	Pro	Leu	Phe	Asn	Ser
					485				490					495	
Leu	Phe	Pro	Val	Ser	Asp	Gly	Ser	Asn	Tyr	Phe	Val	Arg	Leu	Tyr	Thr
					500				505					510	
Glu	Pro	Leu	Val	Asn	Leu	Pro	Thr	Pro	Asp	Phe	Ser	Met	Pro	Tyr	
					515				520					525	
Asn	Val	Ile	Cys	Leu	Thr	Cys	Thr	Val	Val	Ala	Val	Cys	Tyr	Gly	Ser
					530				535					540	
Phe	Tyr	Asn	Leu	Leu	Thr	Arg	Thr	Phe	His	Ile	Glu	Glu	Pro	Arg	Thr
					545				550					555	
Gly	Gly	Leu	Ala	Lys	Arg	Leu	Ala	Asn	Leu	Ile	Arg	Arg	Ala	Arg	Gly
					565				570					575	
Val	Pro	Pro	Leu												

580

&lt;210&gt; 5593

&lt;211&gt; 3078

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5593

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120  
aagtgtttta tttgctacga ttacgatctt tgtgcatctt gttatgaaag tgggtgcaaca  
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acaacaaggc atacaactga ccacccaatg cagtgcataa taacaagggt agattttgat  
240  
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480  
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660  
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720  
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780  
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<212> PRT

<213> Homo sapiens

<400> 5598

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<210> 5600

<211> 923

<212> PRT

<213> Homo sapiens

<400> 5600

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Ala	Tyr	Val	Arg	Val	Leu	Asp	Leu	His	Lys	Lys	Pro	Phe	Leu	Ala	Lys
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Tyr	Phe	Pro	Phe	Met	Asp	Leu	Lys	Leu	Arg	Ala	Ala	Ser	Pro	Ile	Ile
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Thr	Leu	Val	Ala	Leu	Asp	Glu	Ala	Leu	Asp	Asn	Tyr	Thr	Ile	Thr	Phe
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Leu	Ile	Arg	Gly	Val	Ala	Ile	Gly	Gln	Thr	Ser	Leu	Thr	Ala	Ser	Val
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Gln	Asp	Leu	Val	Gln	Val	Glu	Val	Leu	Leu	Leu	Arg	Ala	Val	Arg	Ile
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Arg	Ala	Pro	Ile	Met	Arg	Met	Arg	Thr	Gly	Thr	Gln	Met	Pro	Ile	Tyr
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Asp	Leu	Arg	Gly	Arg	His	His	Glu	Ala	Ser	Ile	Arg	Leu	Pro	Ser	Gln
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Gly	Leu	Ala	Arg	Glu	Leu	Ser	Asp	Glu	Ile	Gln	Val	Gln	Val	Phe	Glu



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Lys	Leu	Gln	Leu	Leu	Asn	Pro	Glu	Ile	Glu	Ala	Glu	Gln	Ile	Leu	Met
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Ser	Pro	Asn	Ser	Tyr	Ile	Lys	Leu	Gln	Thr	Asn	Arg	Asp	Gly	Ala	Ala
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Ser	Leu	Ser	Tyr	Arg	Val	Leu	Asp	Gly	Pro	Glu	Lys	Val	Pro	Val	Val
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His	Val	Asp	Glu	Lys	Gly	Phe	Leu	Ala	Ser	Gly	Ser	Met	Ile	Gly	Thr
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Ser	Thr	Ile	Glu	Val	Ile	Ala	Gln	Glu	Pro	Phe	Gly	Ala	Asn	Gln	Thr
385					390					395					400
Ile	Ile	Val	Ala	Val	Lys	Val	Ser	Pro	Val	Ser	Tyr	Leu	Arg	Val	Ser
			405					410					415		
Met	Ser	Pro	Val	Leu	His	Thr	Gln	Asn	Lys	Glu	Ala	Leu	Val	Ala	Val
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Pro	Leu	Gly	Met	Thr	Val	Thr	Phe	Thr	Val	His	Phe	His	Asp	Asn	Ser
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Gly	Asp	Val	Phe	His	Ala	His	Ser	Ser	Val	Leu	Asn	Phe	Ala	Thr	Asn
	450					455				460					
Arg	Asp	Asp	Phe	Val	Gln	Ile	Gly	Lys	Gly	Pro	Thr	Asn	Asn	Thr	Cys
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Val	Val	Arg	Thr	Val	Ser	Val	Gly	Leu	Thr	Leu	Leu	Arg	Val	Trp	Asp
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Ala	Glu	His	Pro	Gly	Leu	Ser	Asp	Phe	Met	Pro	Leu	Pro	Val	Leu	Gln
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Ala	Ile	Ser	Pro	Glu	Leu	Ser	Gly	Ala	Met	Val	Val	Gly	Asp	Val	Leu
	515						520					525			
Cys	Leu	Ala	Thr	Val	Leu	Thr	Ser	Leu	Glu	Gly	Leu	Ser	Gly	Thr	Trp
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Ser	Ser	Ser	Ala	Asn	Ser	Ile	Leu	His	Ile	Asp	Pro	Lys	Thr	Gly	Val
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Ala	Val	Ala	Arg	Ala	Val	Gly	Ser	Val	Thr	Val	Tyr	Tyr	Glu	Val	Ala
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Ile	Met	Ala	Arg	His	Leu	His	Pro	Ile	Gln	Thr	Ser	Phe	Gln	Glu	Ala
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Pro	Glu	Thr	Leu	Ile	Ser	Cys	Gln	Ser	Gln	Phe	Lys	Pro	Ala	Val	Phe
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Asp	Phe	Pro	Ser	Gln	Asp	Val	Phe	Thr	Val	Glu	Pro	Gln	Phe	Asp	Thr
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Val	Pro	Phe	Ser	Pro	Gly	Leu	Phe	Ala	Asp	Gln	Ala	Glu	Ile	Leu	Leu
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755						760						765					
Phe	Ala	Lys	Glu	Lys	Ser	Phe	Gly	Trp	Pro	Ser	Phe	Ile	Thr	Tyr	Thr		
770						775						780					
Val	Gly	Val	Ser	Asp	Pro	Ala	Ala	Gly	Ser	Gln	Gly	Pro	Leu	Ser	Thr		
785						790						795					
Thr	Leu	Thr	Phe	Ser	Ser	Pro	Val	Thr	Asn	Gln	Ala	Ile	Ala	Ile	Pro		
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Val	Thr	Val	Ala	Phe	Val	Met	Asp	Arg	Arg	Gly	Pro	Gly	Pro	Tyr	Gly		
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Ala	Ser	Leu	Phe	Gln	His	Phe	Leu	Asp	Ser	Tyr	Gln	Val	Met	Phe	Phe		
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Thr	Leu	Phe	Ala	Leu	Leu	Ala	Gly	Thr	Ala	Val	Met	Ile	Ile	Ala	Tyr		
850						855						860					
His	Thr	Val	Cys	Thr	Pro	Arg	Asp	Leu	Ala	Val	Pro	Ala	Ala	Leu	Thr		
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Pro	Arg	Ala	Ser	Pro	Gly	His	Ser	Pro	His	Tyr	Phe	Ala	Ala	Ser	Ser		
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Pro	Thr	Ser	Pro	Asn	Ala	Leu	Pro	Pro	Ala	Arg	Lys	Ala	Ser	Pro	Pro		
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<211> 670
<212> DNA
<213> Homo sapiens
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300
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<210> 5602  
 <211> 213  
 <212> PRT  
 <213> Homo sapiens

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 Arg Arg Thr Thr Ala Ser Leu Leu Arg Lys Leu Thr Thr Ala Ser Asn  
 35 40 45  
 Gly Gly Val Ile Glu Glu Leu Ser Cys Val Arg Ser Asn Asn Tyr Val  
 50 55 60  
 Gln Glu Pro Glu Cys Arg Arg Asn Leu Val Gln Cys Leu Leu Glu Lys  
 65 70 75 80  
 Gln Gly Thr Pro Val Val Gln Gly Ser Leu Glu Leu Glu Arg Val Met  
 85 90 95  
 Ser Ser Leu Leu Asp Met Gly Phe Ser Asn Ala His Ile Asn Glu Leu  
 100 105 110  
 Leu Ser Val Arg Arg Gly Ala Ser Leu Gln Gln Leu Leu Asp Ile Ile  
 115 120 125  
 Ser Glu Phe Ile Leu Leu Gly Leu Asn Pro Glu Pro Val Cys Val Val  
 130 135 140  
 Leu Lys Lys Ser Pro Gln Leu Leu Lys Leu Pro Ile Met Gln Met Arg  
 145 150 155 160  
 Lys Arg Ser Ser Tyr Leu Gln Lys Leu Gly Leu Gly Glu Gly Lys Leu  
 165 170 175  
 Lys Arg Val Leu Tyr Cys Cys Pro Glu Ile Phe Thr Met Arg Gln Gln  
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 Val Pro Leu His Ala  
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<210> 5603  
 <211> 2070  
 <212> DNA  
 <213> Homo sapiens

<400> 5603  
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1980

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 2070

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 <211> 560  
 <212> PRT  
 <213> Homo sapiens

<400> 5604  
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 His Val Cys Arg Pro Pro Gly Asn Val Ser Gln Val Val Phe His Asn  
 35 40 45  
 His Ser Asn Trp Ser Leu Glu Asp Thr Gly Ala Leu Leu Ser Ser Gly  
 50 55 60  
 Gln Lys Asp Tyr Val Thr Val Gln Leu Gln Asn Gly Glu Ile Trp Glu  
 65 70 75 80  
 Leu Ser Arg Cys Ser Arg Asn Lys Arg Glu Asn Thr Ser Ser Leu Gly  
 85 90 95  
 Tyr Glu Tyr Thr Gly Ser Lys Lys Glu Phe Pro Cys Val Asp Gly Tyr  
 100 105 110  
 Ile Tyr Asp Gln Asn Thr Trp Lys Ser Thr Ala Val Thr Gln Trp Asn  
 115 120 125  
 Leu Val Cys Asp Arg Lys Trp Leu Ala Met Leu Ile Gln Pro Leu Phe  
 130 135 140  
 Met Phe Gly Val Leu Leu Gly Ser Val Thr Phe Gly Tyr Phe Ser Asp  
 145 150 155 160  
 Arg Leu Gly Arg Arg Val Val Leu Trp Ala Thr Ser Ser Ser Met Phe  
 165 170 175  
 Leu Phe Gly Ile Ala Ala Ala Phe Ala Val Asp Tyr Tyr Thr Phe Met  
 180 185 190  
 Ala Ala Arg Phe Phe Leu Ala Met Val Ala Ser Gly Tyr Leu Val Val  
 195 200 205  
 Gly Phe Val Tyr Val Met Glu Phe Ile Gly Met Lys Ser Arg Thr Trp  
 210 215 220  
 Ala Ser Val His Leu His Ser Phe Phe Ala Val Gly Thr Leu Leu Val  
 225 230 235 240  
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 245 250 255  
 Leu Ser Thr Val Thr Val Pro Phe Ile Leu Cys Cys Trp Val Leu Pro  
 260 265 270  
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 275 280 285  
 Lys Ile Val Asp Ile Met Ala Lys Trp Asn Arg Ala Ser Ser Cys Lys  
 290 295 300  
 Leu Ser Glu Leu Leu Ser Leu Asp Leu Gln Gly Pro Val Ser Asn Ser  
 305 310 315 320  
 Pro Thr Glu Val Gln Lys His Asn Leu Ser Tyr Leu Phe Tyr Asn Trp  
 325 330 335  
 Ser Ile Thr Lys Arg Thr Leu Thr Val Trp Leu Ile Trp Phe Thr Gly

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Ser Leu Gly Phe Tyr Ser Phe Ser Leu Asn Ser Val Asn Leu Gly Gly
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Asn Glu Tyr Leu Asn Leu Phe Leu Leu Gly Val Val Glu Ile Pro Ala
          370          375          380
Tyr Thr Phe Val Cys Ile Ala Met Asp Lys Val Gly Arg Arg Thr Val
385          390          395          400
Leu Ala Tyr Ser Leu Phe Cys Ser Ala Leu Ala Cys Gly Val Val Met
          405          410          415
Val Ile Pro Gln Lys His Tyr Ile Leu Gly Val Val Thr Ala Met Val
          420          425          430
Gly Lys Phe Ala Ile Gly Ala Ala Phe Gly Leu Ile Tyr Leu Tyr Thr
          435          440          445
Ala Glu Leu Tyr Pro Thr Ile Val Arg Ser Leu Ala Val Gly Ser Gly
          450          455          460
Ser Met Val Cys Arg Leu Ala Ser Ile Leu Ala Pro Phe Ser Val Asp
465          470          475          480
Leu Ser Ser Ile Trp Ile Phe Ile Pro Gln Leu Phe Val Gly Thr Met
          485          490          495
Ala Leu Leu Ser Gly Val Leu Thr Leu Lys Leu Pro Glu Thr Leu Gly
          500          505          510
Lys Arg Leu Ala Thr Thr Trp Glu Glu Ala Ala Lys Leu Glu Ser Glu
          515          520          525
Asn Glu Ser Lys Ser Ser Lys Leu Leu Leu Thr Thr Asn Asn Ser Gly
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Leu Glu Lys Thr Glu Ala Ile Thr Pro Arg Asp Ser Gly Leu Gly Glu
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&lt;210&gt; 5605

&lt;211&gt; 376

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5605

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120
catccaggga ggcctctcca gggaggatga cggaacatca gaggaagaa gcaaggagaa
180
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240
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300
catgccacgg cttgtaggc agaaccctta agtctctttg tagggacccc tttggtctcc
360
cctttgaact acgcc
376

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&lt;210&gt; 5606

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5606

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Ala His Pro Cys Arg Ala Leu Ala Leu Thr Ala Pro Ile Phe Leu Leu
 20           25           30
Leu Phe Pro Ser Ser Glu Cys Gly Trp Phe Ser Leu Leu Leu Ser Ser
 35           40           45
Asp Val Pro Ser Ser Ser Leu Glu Arg Pro Pro Trp Met Thr Glu Glu
 50           55           60
Val Thr Thr Thr Ser Ser Arg Ser Thr Pro Arg Pro Ser Val Ser Pro
 65           70           75           80
Ser Gln Cys Leu Ala Pro Ser Asn Ile Ala Phe Cys Val Tyr His Gln
 85           90           95
Phe Pro Phe Thr Arg
          100

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&lt;210&gt; 5607

&lt;211&gt; 320

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5607

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ggtttggggc gacacgcgga aggcggggtg gageccatcc atgctgtggt gttgcctcga
120
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320

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&lt;210&gt; 5608

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5608

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Val His Thr Arg Gly Ile Gly Ser Arg Leu Leu Thr Lys Met Gly Tyr
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Glu Phe Gly Lys Gly Leu Gly Arg His Ala Glu Gly Arg Val Glu Pro
 20           25           30
Ile His Ala Val Val Leu Pro Arg Gly Lys Ser Leu Asp Gln Cys Val
 35           40           45
Glu Thr Leu Gln Lys Gln Thr Arg Val Gly Lys Ala Gly Thr Asn Lys
 50           55           60
Pro Pro Arg Cys Arg Gly Arg Gly Ala Arg Pro Gly Gly Arg Pro Ala
 65           70           75           80
Pro Arg Asn Val Phe Asp Phe Leu Asn Glu Lys Leu Gln Gly Gln Ala
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100

105

<210> 5609  
 <211> 1843  
 <212> DNA  
 <213> Homo sapiens

<400> 5609

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120
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180
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240
taaaaataga ccggtattga tcatacaaat ctatcatgag aagttacca gtgagagtga
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480
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600
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660
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720
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1320
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1380

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ccatcataag ccctctgaac tcctgctgaa atcggccctt tgaacatcct ctaacccctg  
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<210> 5610

<211> 153

<212> PRT

<213> Homo sapiens

<400> 5610

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			20					25					30		
Phe	Thr	Gly	Gly	Arg	Gln	Asp	His	Thr	Ser	Leu	Pro	His	Trp	Ala	Cys
		35				40						45			
Leu	Leu	Val	Asp	Ser	Cys	Met	Gln	Glu	Ala	Val	Met	Gly	Ser	Leu	Arg
	50				55					60					
Ile	Pro	Gln	Cys	Gly	Asn	Gly	Pro	Leu	Arg	Leu	Val	Leu	Arg	Val	Pro
65					70				75					80	
Gly	Ala	Gln	Ser	Trp	Val	Gly	Gly	Cys	Trp	Trp	Glu	Val	Arg	Asn	Lys
			85					90					95		
Phe	Trp	Leu	Pro	Ser	Gly	Gln	Leu	Pro	Thr	Ala	Leu	Thr	Trp	Glu	Val
			100					105					110		
Asp	Ala	His	Arg	Gln	Asp	Ala	Leu	Gly	Tyr	Cys	Cys	Thr	Val	Leu	His
		115					120					125			
Glu	Ile	Phe	Ile	Gln	Pro	Thr	Arg	Phe	Asn	Arg	Ser	Leu	Gly	Ser	Ser
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Ser	Arg	Leu	Leu	Cys	Leu	Phe	Lys	His							
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<210> 5611

<211> 1152

<212> DNA

<213> Homo sapiens

<400> 5611

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 120

cgggtcctgg cgcctcagag cccggccag gccgcggaac ggtgatgctc gggccggacg  
 180  
 ggcgagcgcg gatccctgcg tcccgtgaa aatgtgtgtc tgacatgcaa gctcagtggg  
 240  
 gcagagaccc gtggattgct gtgccctgcc ctccggacct ggatcatgaa ggtgttggga  
 300  
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 360  
 gaggaggtgg cgcagcgtgt gatcaaaactg caccgcgggc gaggggtggc tgccatgcag  
 420  
 agccggcagt ggggtccggga cagctgcagg aagctctcag ggcttctccg ccagaagaat  
 480  
 gcagttctga acaaactgaa aactgcaatt ggagcagtgg agaaagacgt gggcctgtcg  
 540  
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 600  
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 660  
 aaagatgtcg tgaacatgaa ggagagcagc cggcagcgcc tggaggccct gagagaggct  
 720  
 gcaataaagg aagaaacaga atatatggaa cttctggcag cagaaaaaca tcaagttgaa  
 780  
 gcccttaaaa atatgcaaca tcaaaaccaa agtttatcca tgcttgacga gattcttgaa  
 840  
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 900  
 aataaatcag tcaaggggggt caattttgag gcagttctga ggggtggagga agaagaggcc  
 960  
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 1020  
 attgactccc agaacaacca gtatatatttg accaagccca gagattcaac catcccacgt  
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 1152

&lt;210&gt; 5612

&lt;211&gt; 289

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5612

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 1 5 10 15  
 Pro Trp Ala Val Gln Ala Val Glu His Glu Glu Val Ala Gln Arg Val  
 20 25 30  
 Ile Lys Leu His Arg Gly Arg Gly Val Ala Ala Met Gln Ser Arg Gln  
 35 40 45  
 Trp Val Arg Asp Ser Cys Arg Lys Leu Ser Gly Leu Leu Arg Gln Lys  
 50 55 60  
 Asn Ala Val Leu Asn Lys Leu Lys Thr Ala Ile Gly Ala Val Glu Lys  
 65 70 75 80  
 Asp Val Gly Leu Ser Asp Glu Glu Lys Leu Phe Gln Val His Thr Phe

85								90					95			
Glu	Ile	Phe	Gln	Lys	Glu	Leu	Asn	Glu	Ser	Glu	Asn	Ser	Val	Phe	Gln	
100								105				110				
Ala	Val	Tyr	Gly	Leu	Gln	Arg	Ala	Leu	Gln	Gly	Asp	Tyr	Lys	Asp	Val	
115				120								125				
Val	Asn	Met	Lys	Glu	Ser	Ser	Arg	Gln	Arg	Leu	Glu	Ala	Leu	Arg	Glu	
130				135								140				
Ala	Ala	Ile	Lys	Glu	Glu	Thr	Glu	Tyr	Met	Glu	Leu	Leu	Ala	Ala	Glu	
145				150								155				
Lys	His	Gln	Val	Glu	Ala	Leu	Lys	Asn	Met	Gln	His	Gln	Asn	Gln	Ser	
165								170				175				
Leu	Ser	Met	Leu	Asp	Glu	Ile	Leu	Glu	Asp	Val	Arg	Lys	Ala	Ala	Asp	
180								185				190				
Arg	Leu	Glu	Glu	Glu	Ile	Glu	Glu	His	Ala	Phe	Asp	Asp	Asn	Lys	Ser	
195				200								205				
Val	Lys	Gly	Val	Asn	Phe	Glu	Ala	Val	Leu	Arg	Val	Glu	Glu	Glu	Glu	
210				215								220				
Ala	Asn	Ser	Lys	Gln	Asn	Ile	Thr	Lys	Arg	Glu	Val	Glu	Asp	Asp	Leu	
225				230								235				
Val	Leu	Ser	Met	Leu	Ile	Asp	Ser	Gln	Asn	Asn	Gln	Tyr	Ile	Leu	Thr	
245								250				255				
Lys	Pro	Arg	Asp	Ser	Thr	Ile	Pro	Arg	Ala	Asp	His	His	Phe	Ile	Lys	
260								265				270				
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<210> 5613
<211> 1679
<212> DNA
<213> Homo sapiens
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120
ctcagaccct gtgggggtcaa gtcggcggtg gaggccctag gctcagcctg tggggaccgg
180
cggggactcg gcctgggcag tcctgggaga agctgagccg gctctgcctg aagccagttc
240
tccttgctgc aggtgctggt ggacagcgcg gaggaggggt ccctcgctgc ggcggcggag
300
ctggccgctc agaagcgcgga acagagactg cgcaaattcc gggagctgca cctgatgcgg
360
aatgaagctc gtaaattaaa tcaccaggaa gttgtggaag aagataaaaag actaaaatta
420
cctgcaaatt gggaaagccaa aaaagctcgt ttggagtggg aactaaagga agaggaaaag
480
aaaaaggaat gtgcggcaag aggagaagac tatgagaaaag tgaagttgct ggagatcagt
540
gcagaagatg cagaaagatg ggagaggaaa aagaagagga aaaaccctga tctgggattt
600

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tcagattatg ctgctgccc gttacgccag tatcatcggt tgaccaagca gatcaaacct  
 660  
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 720  
 aatagtcttc ttcattggaac acatgtgcct tccacagagg aaattgacag gatgggtcata  
 780  
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 840  
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 900  
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 960  
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 1020  
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 1080  
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 1140  
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 1200  
 tataattctt aattatatta tttttctatg tattttaaat gtatatggct gtttaattctt  
 1260  
 tgaagcattt tgggcttaag attgccagca gcacacatca gatgcagtca ttgttgctat  
 1320  
 cagtgtggaa tttgatagag tctagactcg ggccacttgg agttgtgtac tccaaagcta  
 1380  
 aggacagtga tgaggaagat ggcagtggcc accggaggac tggagcagtc cctcctcatg  
 1440  
 gcggcctgtg accaaggtcg gggaggagtg gagctatcct tccatgatct gatcatgtac  
 1500  
 ttcggagaga ggctggagtg tgctaccgac gtcgaatata catgcagtcg gttagaggct  
 1560  
 ggagtgtgct accgacgtcg aatatccatg cagactagaa aaccattat ctcagcccaa  
 1620  
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 1679

&lt;210&gt; 5614

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5614

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Ser	Leu	Ala	Ala	Ala	Glu	Leu	Ala	Gln	Lys	Arg	Glu	Gln	Arg		
	20					25			30						
Leu	Arg	Lys	Phe	Arg	Glu	Leu	His	Leu	Met	Arg	Asn	Glu	Ala	Arg	Lys
	35					40			45						
Leu	Asn	His	Gln	Glu	Val	Val	Glu	Glu	Asp	Lys	Arg	Leu	Lys	Leu	Pro
	50				55				60						
Ala	Asn	Trp	Glu	Ala	Lys	Lys	Ala	Arg	Leu	Glu	Trp	Glu	Leu	Lys	Glu
65			70					75					80		
Glu	Glu	Lys	Lys	Lys	Glu	Cys	Ala	Ala	Arg	Gly	Glu	Asp	Tyr	Glu	Lys

85								90				95			
Val	Lys	Leu	Leu	Glu	Ile	Ser	Ala	Glu	Asp	Ala	Glu	Arg	Trp	Glu	Arg
100								105				110			
Lys	Lys	Lys	Arg	Lys	Asn	Pro	Asp	Leu	Gly	Phe	Ser	Asp	Tyr	Ala	Ala
115				120								125			
Ala	Gln	Leu	Arg	Gln	Tyr	His	Arg	Leu	Thr	Lys	Gln	Ile	Lys	Pro	Asp
130				135								140			
Met	Glu	Thr	Tyr	Glu	Arg	Leu	Arg	Glu	Lys	His	Gly	Glu	Glu	Phe	Phe
145				150								155			
Pro	Thr	Ser	Asn	Ser	Leu	Leu	His	Gly	Thr	His	Val	Pro	Ser	Thr	Glu
165								170				175			
Glu	Ile	Asp	Arg	Met	Val	Ile	Asp	Leu	Glu	Lys	Gln	Ile	Glu	Lys	Arg
180								185				190			
Asp	Lys	Tyr	Ser	Arg	Arg	Arg	Pro	Tyr	Asn	Asp	Asp	Ala	Asp	Ile	Asp
195				200								205			
Tyr	Ile	Asn	Glu	Arg	Asn	Ala	Lys	Phe	Asn	Lys	Lys	Ala	Glu	Arg	Phe
210				215								220			
Tyr	Gly	Lys	Tyr	Thr	Ala	Glu	Ile	Lys	Gln	Asn	Leu	Glu	Arg	Gly	Thr
225				230								235			
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<210> 5615
<211> 1522
<212> DNA
<213> Homo sapiens
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120
ccacagactg ttccttcaca accgtccagt agtactgtcc ctctccacc acacagacct
180
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240
tggtcatga tgcagtccta catggatcct cgaatgatgt caggaagacc tgctatggat
300
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360
gaaggggtcac cgaacagttc tgagtcattt gagcatatag ctcgatctgc aagagatcac
420
gcaatttccc tttctgagcc tcgtatgctg tgggggtcag atccctatcc tcatgctgag
480
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540
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600
cacccaaagg cagactttat cagagaatca agtgaggcac aagtacaaaa gtttttaagc
660
agatctgtgg aagatgttag acctcaccat actgatgcaa ataatcagtc tgcttgtttt
720
gaagcacctg atcaaaagac cttatccact cctcaagagg agcggatttc agctgtagaa
780

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 840  
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 900  
 aaagaaccaa tagaaaggcc agaggagaaa ccaaaaaagg aaggctttat acgatcttct  
 960  
 gaaggaccaa aacctgaaaa agtatataaa tctaaatcag aaactcgttg gggcccacga  
 1020  
 ccaagctcta acagaaggga agaagttaat gatagacctg tgagaagatc aggtccatt  
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 1260  
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 1380  
 cctgcagtta agactgtaaa ccaacagact atggcagcac cagtagtcaa agaaaaagaa  
 1440  
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<210> 5616

<211> 507

<212> PRT

<213> Homo sapiens

<400> 5616

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			20					25					30		
Gln	Gln	Gln	Gln	Gln	Gly	Val	Leu	Pro	Gln	Thr	Val	Pro	Ser	Gln	Pro
			35				40					45			
Ser	Ser	Ser	Thr	Val	Pro	Pro	Pro	Pro	His	Arg	Pro	Leu	Tyr	Gln	Pro
	50					55					60				
Met	Gln	Pro	His	Pro	Gln	His	Leu	Ala	Ser	Met	Gly	Phe	Asp	Pro	Arg
65					70					75				80	
Trp	Leu	Met	Met	Gln	Ser	Tyr	Met	Asp	Pro	Arg	Met	Met	Ser	Gly	Arg
			85					90						95	
Pro	Ala	Met	Asp	Ile	Pro	Pro	Ile	His	Pro	Gly	Met	Ile	Pro	Pro	Lys
			100					105					110		
Pro	Leu	Met	Arg	Arg	Asp	Gln	Met	Glu	Gly	Ser	Pro	Asn	Ser	Ser	Glu
			115				120					125			
Ser	Phe	Glu	His	Ile	Ala	Arg	Ser	Ala	Arg	Asp	His	Ala	Ile	Ser	Leu
	130					135					140				
Ser	Glu	Pro	Arg	Met	Leu	Trp	Gly	Ser	Asp	Pro	Tyr	Pro	His	Ala	Glu
145					150					155				160	
Pro	Gln	Gln	Ala	Thr	Thr	Pro	Lys	Ala	Thr	Glu	Glu	Pro	Glu	Asp	Val

165										170				175			
Arg	Ser	Glu	Ala	Ala	Leu	Asp	Gln	Glu	Gln	Ile	Thr	Ala	Ala	Tyr	Ser		
180				185				190									
Val	Glu	His	Asn	Gln	Leu	Glu	Ala	His	Pro	Lys	Ala	Asp	Phe	Ile	Arg		
195				200				205									
Glu	Ser	Ser	Glu	Ala	Gln	Val	Gln	Lys	Phe	Leu	Ser	Arg	Ser	Val	Glu		
210				215				220									
Asp	Val	Arg	Pro	His	His	Thr	Asp	Ala	Asn	Asn	Gln	Ser	Ala	Cys	Phe		
225				230				235				240					
Glu	Ala	Pro	Asp	Gln	Lys	Thr	Leu	Ser	Thr	Pro	Gln	Glu	Glu	Arg	Ile		
245				250				255									
Ser	Ala	Val	Glu	Ser	Gln	Pro	Ser	Arg	Lys	Arg	Ser	Val	Ser	His	Gly		
260				265				270									
Ser	Asn	His	Thr	Gln	Lys	Pro	Asp	Glu	Gln	Arg	Ser	Glu	Pro	Ser	Ala		
275				280				285									
Gly	Ile	Pro	Lys	Val	Thr	Ser	Arg	Cys	Ile	Asp	Ser	Lys	Glu	Pro	Ile		
290				295				300									
Glu	Arg	Pro	Glu	Glu	Lys	Pro	Lys	Lys	Glu	Gly	Phe	Ile	Arg	Ser	Ser		
305				310				315				320					
Glu	Gly	Pro	Lys	Pro	Glu	Lys	Val	Tyr	Lys	Ser	Lys	Ser	Glu	Thr	Arg		
325				330				335									
Trp	Gly	Pro	Arg	Pro	Ser	Ser	Asn	Arg	Arg	Glu	Glu	Val	Asn	Asp	Arg		
340				345				350									
Pro	Val	Arg	Arg	Ser	Gly	Pro	Ile	Lys	Lys	Pro	Val	Leu	Arg	Asp	Met		
355				360				365									
Lys	Glu	Glu	Arg	Glu	Gln	Arg	Lys	Glu	Lys	Glu	Gly	Glu	Lys	Ala	Glu		
370				375				380									
Lys	Val	Thr	Glu	Lys	Val	Val	Val	Lys	Pro	Glu	Lys	Thr	Glu	Lys	Lys		
385				390				395				400					
Asp	Leu	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Gln	Pro	Pro	Ala	Pro	Ile	Gln		
405				410				415									
Pro	Gln	Ser	Val	Pro	Pro	Pro	Ile	Gln	Pro	Glu	Ala	Glu	Lys	Phe	Pro		
420				425				430									
Ser	Thr	Glu	Thr	Ala	Thr	Leu	Ala	Gln	Lys	Pro	Ser	Gln	Asp	Thr	Glu		
435				440				445									
Lys	Pro	Leu	Glu	Pro	Val	Ser	Thr	Val	Gln	Val	Glu	Pro	Ala	Val	Lys		
450				455				460									
Thr	Val	Asn	Gln	Gln	Thr	Met	Ala	Ala	Pro	Val	Val	Lys	Glu	Lys	Glu		
465				470				475				480					
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<210> 5617

<211> 3480

<212> DNA

<213> Homo sapiens

<400> 5617

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1740



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<210> 5618

<211> 1003

<212> PRT

<213> Homo sapiens

<400> 5618

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			20					25					30		
Thr	Thr	Pro	Lys	Ser	Phe	Leu	Glu	Gln	Ile	Ser	Leu	Phe	Lys	Asn	Leu
			35				40					45			
Leu	Lys	Lys	Lys	Gln	Asn	Glu	Val	Ser	Glu	Lys	Lys	Glu	Arg	Leu	Val
	50				55					60					
Asn	Gly	Ile	Gln	Lys	Leu	Lys	Thr	Thr	Ala	Ser	Gln	Val	Gly	Asp	Leu
65					70				75					80	
Lys	Ala	Arg	Leu	Ala	Ser	Gln	Glu	Ala	Glu	Leu	Gln	Leu	Arg	Asn	His
				85				90						95	
Asp	Ala	Glu	Ala	Leu	Ile	Thr	Lys	Ile	Gly	Leu	Gln	Thr	Glu	Lys	Val
			100					105					110		
Ser	Arg	Glu	Lys	Thr	Ile	Ala	Asp	Ala	Glu	Glu	Arg	Lys	Val	Thr	Ala
			115					120					125		
Ile	Gln	Thr	Glu	Val	Phe	Gln	Lys	Gln	Arg	Glu	Cys	Glu	Ala	Asp	Leu
	130					135					140				
Leu	Lys	Ala	Glu	Pro	Ala	Leu	Val	Ala	Ala	Thr	Ala	Ala	Leu	Asn	Thr
145					150				155					160	
Leu	Asn	Arg	Val	Asn	Leu	Ser	Glu	Leu	Lys	Ala	Phe	Pro	Asn	Pro	Pro
				165					170					175	
Ile	Ala	Val	Thr	Asn	Val	Thr	Ala	Ala	Val	Met	Val	Leu	Leu	Ala	Pro
			180					185					190		
Arg	Gly	Arg	Val	Pro	Lys	Asp	Arg	Ser	Trp	Lys	Ala	Ala	Lys	Val	Phe
			195				200					205			
Met	Gly	Lys	Val	Asp	Asp	Phe	Leu	Gln	Ala	Leu	Ile	Asn	Tyr	Asp	Lys
	210					215						220			
Glu	His	Ile	Pro	Glu	Asn	Cys	Leu	Lys	Val	Val	Asn	Glu	His	Tyr	Leu
225					230					235					240
Lys	Asp	Pro	Glu	Phe	Asn	Pro	Asn	Leu	Ile	Arg	Thr	Lys	Ser	Phe	Ala
				245					250					255	
Ala	Ala	Gly	Leu	Cys	Ala	Trp	Val	Ile	Asn	Ile	Ile	Lys	Phe	Tyr	Glu
			260					265					270		
Val	Tyr	Cys	Asp	Val	Glu	Pro	Lys	Arg	Gln	Ala	Leu	Ala	Gln	Ala	Asn
			275				280					285			
Leu	Glu	Leu	Ala	Ala	Ala	Thr	Glu	Lys	Leu	Glu	Ala	Ile	Arg	Lys	Lys
	290					295					300				
Leu	Val	Val	Ser	Ala	Asn	Tyr	Asp	Ile	Glu	Lys	Ser	Glu	Lys	Ile	Arg
305					310					315				320	
Trp	Gly	Gln	Ser	Ile	Lys	Ser	Phe	Glu	Ala	Gln	Glu	Lys	Thr	Leu	Cys
				325					330					335	
Gly	Asp	Val	Leu	Leu	Thr	Ala	Ala	Phe	Val	Ser	Tyr	Val	Gly	Pro	Phe

[illegible]

770		775		780
Trp Val Glu Ser Glu Cys Pro Glu Lys Glu Lys Leu Pro Gln Glu Trp				
785		790		800
Lys Lys Lys Ser Leu Ile Gln Lys Leu Ile Leu Leu Arg Ala Met Arg				
	805		810	815
Pro Asp Arg Met Thr Tyr Ala Leu Arg Asn Phe Val Glu Glu Lys Leu				
	820		825	830
Gly Ala Lys Tyr Val Glu Arg Thr Arg Leu Asp Leu Val Lys Ala Phe				
	835		840	845
Glu Glu Ser Ser Pro Ala Thr Pro Ile Phe Phe Ile Leu Ser Pro Gly				
	850		855	860
Val Asp Ala Leu Lys Asp Leu Glu Ile Leu Gly Lys Arg Leu Gly Phe				
865		870		880
Thr Ile Asp Ser Gly Lys Phe His Asn Val Ser Leu Gly Gln Gly Gln				
	885		890	895
Glu Thr Val Ala Glu Val Ala Leu Glu Lys Ala Ser Lys Gly Gly His				
	900		905	910
Trp Val Ile Leu Gln Asn Val His Leu Val Ala Lys Trp Leu Gly Thr				
	915		920	925
Leu Glu Lys Leu Leu Glu Arg Phe Ser Gln Gly Ser His Arg Asp Tyr				
	930		935	940
Arg Val Phe Met Ser Ala Glu Ser Ala Pro Thr Pro Asp Glu His Ile				
945		950		960
Ile Pro Gln Gly Leu Leu Glu Asn Ser Ile Lys Ile Thr Asn Glu Pro				
	965		970	975
Pro Thr Gly Met Leu Ala Asn Leu His Ala Ala Leu Tyr Asn Phe Asp				
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&lt;210&gt; 5619

&lt;211&gt; 1219

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5619

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180
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360
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420
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480
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540

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 720  
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 780  
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 1020  
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<210> 5620

<211> 333

<212> PRT

<213> Homo sapiens

<400> 5620

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			20					25				30			
Glu	Asn	Arg	Glu	Asp	Ile	Ser	Gln	Tyr	Gly	Ile	Ala	Arg	Phe	Phe	Thr
	35						40				45				
Glu	Tyr	Phe	Asn	Ser	Val	Cys	Gln	Gly	Thr	His	Ile	Leu	Phe	Arg	Glu
	50					55				60					
Phe	Ser	Phe	Val	Gln	Ala	Thr	Pro	His	Asn	Arg	Val	Ser	Phe	Leu	Arg
65					70				75					80	
Ala	Phe	Trp	Arg	Cys	Phe	Arg	Thr	Val	Gly	Lys	Asn	Gly	Asp	Leu	Leu
			85					90					95		
Thr	Met	Lys	Glu	Tyr	His	Cys	Leu	Leu	Gln	Leu	Leu	Cys	Pro	Asp	Phe
			100					105					110		
Pro	Leu	Glu	Leu	Thr	Gln	Lys	Ala	Ala	Arg	Ile	Val	Leu	Met	Asp	Asp
			115				120					125			
Ala	Met	Asp	Cys	Leu	Met	Ser	Phe	Ser	Asp	Phe	Leu	Phe	Ala	Phe	Gln
	130					135					140				
Ile	Gln	Phe	Tyr	Tyr	Ser	Glu	Phe	Leu	Asp	Ser	Val	Ala	Ala	Ile	Tyr
145					150				155					160	
Glu	Asp	Leu	Leu	Ser	Gly	Lys	Asn	Pro	Asn	Thr	Val	Ile	Val	Pro	Thr
			165					170						175	
Ser	Ser	Ser	Gly	Gln	His	Arg	Gln	Arg	Pro	Ala	Leu	Gly	Gly	Ala	Gly

	180		185		190										
Thr	Leu	Glu	Gly	Val	Glu	Ala	Ser	Leu	Phe	Tyr	Gln	Cys	Leu	Glu	Asn
	195						200					205			
Leu	Cys	Asp	Arg	His	Lys	Tyr	Ser	Cys	Pro	Pro	Pro	Ala	Leu	Val	Lys
	210					215					220				
Glu	Ala	Leu	Ser	Asn	Val	Gln	Arg	Leu	Thr	Phe	Tyr	Gly	Phe	Leu	Met
225					230					235				240	
Ala	Leu	Ser	Lys	His	Arg	Gly	Ile	Asn	Gln	Ala	Leu	Gly	Lys	Ser	Glu
			245					250					255		
Leu	Ser	Ser	Arg	Gln	Pro	Leu	Leu	Pro	His	Asn	Thr	Gly	Ser	Ser	Trp
	260						265					270			
Pro	Leu	Leu	Ala	Thr	Arg	Leu	Gln	Arg	Gly	Arg	Gly	Ile	Thr	Ile	Ser
	275					280					285				
Ala	Leu	Thr	Ser	Gln	Gly	Arg	Thr	Gln	Ser	Gln	Gly	Ala	Gly	Ile	Trp
	290				295				300						
Arg	Gln	Asn	Met	Ala	Leu	Thr	His	Ser	His	Gly	Arg	Gly	Gln	Pro	Ser
305				310					315					320	
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			325					330							

<210> 5621  
 <211> 456  
 <212> DNA  
 <213> Homo sapiens

<400> 5621  
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 360  
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 456

<210> 5622  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<400> 5622  
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[illegible]

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<211> 357
<212> DNA
<213> Homo sapiens
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gccatttgtt attacctcat tcaaaagttt cattccaggg ctttatatta caagttggca
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gtggagcagc tgcagagcca tcccaggga caggaagctc tgggccctcc tctcaacatc
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<210> 5624
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<212> PRT
<213> Homo sapiens
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Arg Ile Leu Phe His Gly Val Phe Tyr Ala Gly Gly Phe Ala Ile Val
             20             25             30
Tyr Tyr Leu Ile Gln Lys Phe His Ser Arg Ala Leu Tyr Tyr Lys Leu
             35             40             45
Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
             50             55             60
Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
65             70             75             80
Val Asp Ile Val Asp Ala Lys Leu
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<210> 5625
<211> 1017
<212> DNA
<213> Homo sapiens
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 180  
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 240  
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 300  
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 420  
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&lt;210&gt; 5626

&lt;211&gt; 339

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5626

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			20					25					30		
Val	Phe	Pro	Phe	Lys	Pro	Pro	Gln	Arg	Ile	Glu	Ala	Arg	Thr	His	Leu
		35					40				45				
Gln	Leu	Gly	Ser	Val	Leu	Tyr	His	His	Thr	Lys	Asn	Ser	Glu	Gln	Ala
		50				55					60				
Arg	Ser	His	Leu	Glu	Lys	Ala	Trp	Leu	Ile	Ser	Gln	Gln	Ile	Pro	Gln
65					70				75					80	
Phe	Glu	Asp	Val	Lys	Phe	Glu	Ala	Ala	Ser	Leu	Leu	Ser	Glu	Leu	Tyr
			85					90					95		
Cys	Gln	Glu	Asn	Ser	Val	Asp	Ala	Ala	Lys	Pro	Leu	Leu	Arg	Lys	Ala
			100					105					110		
Ile	Gln	Ile	Ser	Gln	Gln	Thr	Pro	Tyr	Trp	His	Cys	Arg	Leu	Leu	Phe



[illegible]

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<210> 5627
<211> 1401
<212> DNA
<213> Homo sapiens
```

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<400> 5627
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60
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120
aagagccagg gttatgtgca catgggaggt ggggaggaca ggggctgtat gtgacctca
180
catctgttcc tcgcgcccc aatggcttct gctgcctgct ccatggacct catcgacagc
240
tttgagctcc tggatctcct gtttgaccgg caggacggca tcttgagaca cgtggagctg
300
ggcgaggggt ggggtcacgt caaggaccag gtcctgcca accccgactc tgacgacttc
360
ctcagctcca tcttgggctc tggagactca ctgcccagct cccactctg gtccccgaa
420
ggcagtgata gtggcatctc cgaagacctc ccctccgacc ccaggacac ccctccagc
480
agcggaccag ccacctcccc cgccggctgc catcctgccc agcctggcaa ggggccctgc
540

```

ctctcctatc atcctggcaa ctcttgctcc accacaaccc cagggccagt gatccaacaa  
 600  
 cagcatcacc tgggggcctc ctacctctg cgacctgggg ctgggcaactg tcaggagctg  
 660  
 gtgctcaccg aggatgagaa gaagctgctg gctaaagaag gcatcaccct gcccaactcag  
 720  
 ctgccccctca ctaagtacga ggagcgagtg ctgaaaaaaaa tccgccggaa aatccggaac  
 780  
 aagcagtcgg cgcaagaaag caggaagaag aagaaggaat atatcgatgg cctggagact  
 840  
 cggtcctggt gctgtccttt gccctcatca tctccccctc catcagccct tttggcccca  
 900  
 acaaaaccga gagccctggg gactttgcgc ctgtacgagt gttctccaga actttgcaca  
 960  
 acgatgctgc ctcccgcgtg gctgctgatg ctgtgccagg ctccgaggcc ccaggacccc  
 1020  
 gacccgaggc tgacacaacc cgagaagagt ctccaggaag ccccggggca gactggggct  
 1080  
 tccaggacac cgcgaaacctg accaattcga cggaggagct ggacaacgcc accctgggtcc  
 1140  
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 1200  
 cgagcactgg ctccaggacgt gcagggctgg aggcggcggg agacgagctg tgagccccac  
 1260  
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 1320  
 ctaccacct ggggatggga cgtgaggcca agacccagc agagatgcca gaatggggga  
 1380  
 ggcacagctc atagccacac a  
 1401

&lt;210&gt; 5628

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5628

Met	Ala	Ser	Ala	Ala	Cys	Ser	Met	Asp	Pro	Ile	Asp	Ser	Phe	Glu	Leu
1				5				10					15		
Leu	Asp	Leu	Leu	Phe	Asp	Arg	Gln	Asp	Gly	Ile	Leu	Arg	His	Val	Glu
		20					25				30				
Leu	Gly	Glu	Gly	Trp	Gly	His	Val	Lys	Asp	Gln	Val	Leu	Pro	Asn	Pro
		35				40					45				
Asp	Ser	Asp	Asp	Phe	Leu	Ser	Ser	Ile	Leu	Gly	Ser	Gly	Asp	Ser	Leu
	50				55				60						
Pro	Ser	Ser	Pro	Leu	Trp	Ser	Pro	Glu	Gly	Ser	Asp	Ser	Gly	Ile	Ser
65				70				75					80		
Glu	Asp	Leu	Pro	Ser	Asp	Pro	Gln	Asp	Thr	Pro	Pro	Arg	Ser	Gly	Pro
			85				90						95		
Ala	Thr	Ser	Pro	Ala	Gly	Cys	His	Pro	Ala	Gln	Pro	Gly	Lys	Gly	Pro
		100					105					110			
Cys	Leu	Ser	Tyr	His	Pro	Gly	Asn	Ser	Cys	Ser	Thr	Thr	Thr	Pro	Gly
	115					120					125				
Pro	Val	Ile	Gln	Gln	Gln	His	His	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Arg

130		135		140
Pro Gly Ala Gly His Cys Gln Glu Leu Val Leu Thr Glu Asp Glu Lys				
145		150		155
Lys Leu Leu Ala Lys Glu Gly Ile Thr Leu Pro Thr Gln Leu Pro Leu				
	165		170	175
Thr Lys Tyr Glu Glu Arg Val Leu Lys Lys Ile Arg Arg Lys Ile Arg				
	180		185	190
Asn Lys Gln Ser Ala Gln Glu Ser Arg Lys Lys Lys Lys Glu Tyr Ile				
	195		200	205
Asp Gly Leu Glu Thr Arg Ser Cys Cys Cys Pro Leu Pro Ser Ser Ser				
	210		215	220
Ser Pro Pro Ser Ala Leu Leu Ala Pro Thr Lys Pro Arg Ala Leu Gly				
225		230		235
Thr Leu Arg Leu Tyr Glu Cys Ser Pro Glu Leu Cys Thr Thr Met Leu				
	245		250	255
Pro Pro Ala Trp Leu Leu Met Leu Cys Gln Ala Pro Arg Pro Gln Asp				
	260		265	270
Pro Asp Pro Arg Leu Thr Gln Pro Glu Lys Ser Leu Gln Glu Ala Pro				
	275		280	285
Gly Gln Thr Gly Ala Ser Arg Thr Pro Arg Thr				
	290		295	

&lt;210&gt; 5629

&lt;211&gt; 428

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5629

gtgcacgacc ccactgaatc atcccacaac catggatggg agacacactc agtctccttt

60

aacagaagat aaagctgggg cttacagaga atgtacaact tggcccaggg cacaccagtt

120

agccatcagg ggcagngctg ctattcaggt ctgggactgt gggactccag agcccatggt

180

ttttacgagg atgccatact gccacaatgg atggtgtctt tatctctga tatatgattg

240

tgtgttggga ggcgtggggg ggcagctgga agaattggaga ggcataatttg tggaggatct

300

tccccattc tctgctaccc tctcttgagg ctcccagttc catctgagaa attatctact

360

ctgagaaatc gtcacaacac agcatggttg tgagtgcagt ggcagaagcc tgtgcctggt

420

tgtatggg

428

&lt;210&gt; 5630

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5630

Met Asp Gly Arg His Thr Gln Ser Pro Leu Thr Glu Asp Lys Ala Gly

1

5

10

15

Ala Tyr Arg Glu Cys Thr Thr Trp Pro Arg Ala His Gln Leu Ala Ile

			20					25				30			
Arg	Gly	Xaa	Ala	Ala	Ile	Gln	Val	Trp	Asp	Cys	Gly	Thr	Pro	Glu	Pro
		35					40					45			
Met	Phe	Phe	Thr	Arg	Met	Pro	Tyr	Cys	His	Asn	Gly	Trp	Cys	Leu	Tyr
	50					55					60				
Leu	Leu	Ile	Tyr	Asp	Cys	Val	Leu	Gly	Gly	Val	Gly	Trp	Gln	Leu	Glu
65					70					75					80
Glu	Trp	Arg	Gly	Ile	Phe	Val	Glu	Asp	Leu	Pro	Pro	Phe	Ser	Ala	Thr
				85					90					95	
Leu	Ser	Trp	Ser	Ser	Gln	Phe	His	Leu	Arg	Asn	Tyr	Leu	Leu		
			100					105						110	

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<210> 5631
<211> 783
<212> DNA
<213> Homo sapiens
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<400> 5631
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120
ctttttatta cgagtgaaca gatgaactaa ggtaagcggg tctcagcctt ccgctgggtg
180
agcatctcca cgcagggcct cagccccgtc ctggccttgc ctgaggactg caccatgggt
240
gttccttggg catggaggag gcagcaggaa ggggtgacag gagcaggagc aggtgcaggg
300
cacctcacac cacaggcctc cccacctct gagctgcca cagccaagac tcttggcgag
360
gccgggagag gaggggtgag agggaaggag ggtctctgtg aaagcaagcc ccacccccag
420
agcagagcag agaccaggt ctgcaaata caccctcccc ccacgagttc ctcttttag
480
gccagcagca cccgagggag ggcaggggct gcacagagac cagagaaagg aaaacccac
540
agaagaaaac tcaaagcatc agtcccatgc gtgtctgctg aacgagtga tgggccc aaa
600
ggctcttctc taaaacggc acgcatccat ccgacagggg gccacaggac acggccgggg
660
ccgtctgcgt ctgtgcctgt gcagcccaca ccagtgcagc ccggggccct ctcagacctc
720
accacacgcg tgcccagcac atgtgtgcac acgcagatgc aggagagaac acacaccacc
780
gtc
783

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```
<210> 5632
<211> 183
<212> PRT
<213> Homo sapiens
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<400> 5632  
Met Gly Val Pro Trp Ala Trp Arg Arg Gln Gln Glu Gly Val Thr Gly

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720

cggtctttca gcgccatctt caagtacgag gtcccagccg agtgaggcgc tgcagctgcc  
780  
ggactcttct gcttgtcact tgtccgagtg gcttcagaga ttaaaggggc cccctcataa  
840  
atgtgcctta attttcgcag ataacagggg gaatagacat ctttttggga gtcttcccct  
900  
ttgtcaggga gctactcctt agagggacag aggtcatcct ggcgtgcaac tcaggccccg  
960  
ccctgaacga cgtgaccac agcgagtccc tcatcgtggc agagcgtatt gcgggcatgg  
1020  
accctgaccg tgcgcagcct gctggacacc agggagcact gtctgaacga gttcaacttc  
1080  
cggatccct actccaaagt gaagcagcgg gagaatggcg tggcgctgag gtgcttcccc  
1140  
ggggtcgtgc gctccctgga cgcgctgggc tgggaggaac ggcagctggc gctggtgaaa  
1200  
ggcctcctgg cggggaatgt cttcgactgg ggggcaaag ccgtgtctgc tgccttgaa  
1260  
tccgaccct actttgggtt tgaagaagca aagaggaagt tacaagaaag accctggctc  
1320  
gtggattcct acagcgagtg gcttcagaga ttaaaggggc cccctcataa atgtgcctta  
1380  
attttcgcag ataacagtgg aatagacatc attttgggag tcttcccctt tgtcagggag  
1440  
ctactcctta gagggacaga ggtcatcctg gcgtgcaact caggccccgc cctgaacgac  
1500  
gtgaccaca gcgagtcct catcgtggca gagcgtattg cgggcatgga ccctgtcgtg  
1560  
cactctgcgc tccaggaaga gaggctgctg ctggtgcaga cgggctccag ctcccctgctg  
1620  
ctcgacctca gccgcctgga taaggggctg gccgcactgg tgcgggagcg tggcgcgga  
1680  
ctggtggtca tcgagggcat gggccgtgct gtccacacaa actaccacgc agccctgcgc  
1740  
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1800  
cggctcttca gcgtcatctt caagtacgag gtcccagccg agtgaggcgc tgcagctgcc  
1860  
ggactcttct gcttgtcact tgtcaggaat gtgtttttac caccacaggg aaactgcgtt  
1920  
caaatcaacg tatttatatg gtactgctgt gacgcggcac atacaccca gccgcacaga  
1980  
tgcgtgtgac ccagaggcga gacgcagctt tgtcctggga gacgttcata ttggaatcta  
2040  
tttaactgct aaagaacctt ttatatatat atatatatat aaatagagag atctatacag  
2100  
gtatgtctga cgggacgcag caccgtgggc acgcacaaa tagagttttt aaaagaggaa  
2160  
aaaaaactct atttggtgcg t  
2181

&lt;210&gt; 5634

&lt;211&gt; 289

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5634

```

Pro Thr Ala Ser Pro Ser Ser Trp Gln Ser Val Leu Arg Ala Trp Thr
 1           5           10           15
Leu Thr Val Arg Ser Leu Leu Asp Thr Arg Glu His Cys Leu Asn Glu
          20           25           30
Phe Asn Phe Pro Asp Pro Tyr Ser Lys Val Lys Gln Arg Glu Asn Gly
          35           40           45
Val Ala Leu Arg Cys Phe Pro Gly Val Val Arg Ser Leu Asp Ala Leu
          50           55           60
Gly Trp Glu Glu Arg Gln Leu Ala Leu Val Lys Gly Leu Leu Ala Gly
65           70           75           80
Asn Val Phe Asp Trp Gly Ala Lys Ala Val Ser Ala Val Leu Glu Ser
          85           90           95
Asp Pro Tyr Phe Gly Phe Glu Glu Ala Lys Arg Lys Leu Gln Glu Arg
          100          105          110
Pro Trp Leu Val Asp Ser Tyr Ser Glu Trp Leu Gln Arg Leu Lys Gly
          115          120          125
Pro Pro His Lys Cys Ala Leu Ile Phe Ala Asp Asn Ser Gly Ile Asp
          130          135          140
Ile Ile Leu Gly Val Phe Pro Phe Val Arg Glu Leu Leu Leu Arg Gly
145          150          155          160
Thr Glu Val Ile Leu Ala Cys Asn Ser Gly Pro Ala Leu Asn Asp Val
          165          170          175
Thr His Ser Glu Ser Leu Ile Val Ala Glu Arg Ile Ala Gly Met Asp
          180          185          190
Pro Val Val His Ser Ala Leu Gln Glu Glu Arg Leu Leu Leu Val Gln
          195          200          205
Thr Gly Ser Ser Ser Pro Cys Leu Asp Leu Ser Arg Leu Asp Lys Gly
210          215          220
Leu Ala Ala Leu Val Arg Glu Arg Gly Ala Asp Leu Val Val Ile Glu
225          230          235          240
Gly Met Gly Arg Ala Val His Thr Asn Tyr His Ala Ala Leu Arg Cys
          245          250          255
Glu Ser Leu Lys Leu Ala Val Ile Lys Asn Ala Trp Leu Ala Glu Arg
          260          265          270
Leu Gly Gly Arg Leu Phe Ser Val Ile Phe Lys Tyr Glu Val Pro Ala
          275          280          285
Glu

```

&lt;210&gt; 5635

&lt;211&gt; 614

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5635

```

nntgtgaaag atgttgcaga agtgttccag aagtggctga agatagaagg aaaaaagtgc
60
cactgcctat cagaaaaaac aaaacaaaac atgggaaata caaccaccaa attccgtaaa
120
gcactcatca atggtgatga aaacctggcc tgccaaatat atgaaaacaa tcctcagcta
180

```

aaagaatctc ttgatccaaa tacatcttat ggggagccct accagcacia tactccatta  
 240  
 cattatgctg ctagacatgg aatgaataaa atattaggag atgatttcag aagagcagat  
 300  
 tgtctgcaga tgatcttaaa atggaaagga gcaaaacttg accaggggtga atatgagaga  
 360  
 gcagctattg atgctgttga taacaaaaaa aacacaccct tgcactatgc tgctgcctca  
 420  
 gggatgaaag cctgtgtaga aaaacatgga ggagacttgt ttgctgagaa tgaaaataaa  
 480  
 gatactcctt gtgattgtgc tgaaaagcaa caccacaaag atttggcctt caatctggaa  
 540  
 tctcaaatgg tattctcacg ggatcccag gctgaagaaa tagaagctga atatgctgca  
 600  
 ttagacaaac gaga  
 614

<210> 5636

<211> 204

<212> PRT

<213> Homo sapiens

<400> 5636

Xaa	Val	Lys	Asp	Val	Ala	Glu	Val	Phe	Gln	Lys	Trp	Leu	Lys	Ile	Glu	1	5	10	15
Gly	Lys	Lys	Cys	His	Cys	Leu	Ser	Glu	Lys	Thr	Lys	Gln	Asn	Met	Gly	20	25	30	
Asn	Thr	Thr	Thr	Lys	Phe	Arg	Lys	Ala	Leu	Ile	Asn	Gly	Asp	Glu	Asn	35	40	45	
Leu	Ala	Cys	Gln	Ile	Tyr	Glu	Asn	Asn	Pro	Gln	Leu	Lys	Glu	Ser	Leu	50	55	60	
Asp	Pro	Asn	Thr	Ser	Tyr	Gly	Glu	Pro	Tyr	Gln	His	Asn	Thr	Pro	Leu	65	70	75	80
His	Tyr	Ala	Ala	Arg	His	Gly	Met	Asn	Lys	Ile	Leu	Gly	Asp	Asp	Phe	85	90	95	
Arg	Arg	Ala	Asp	Cys	Leu	Gln	Met	Ile	Leu	Lys	Trp	Lys	Gly	Ala	Lys	100	105	110	
Leu	Asp	Gln	Gly	Glu	Tyr	Glu	Arg	Ala	Ala	Ile	Asp	Ala	Val	Asp	Asn	115	120	125	
Lys	Lys	Asn	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Ser	Gly	Met	Lys	Ala	130	135	140	
Cys	Val	Glu	Lys	His	Gly	Gly	Asp	Leu	Phe	Ala	Glu	Asn	Glu	Asn	Lys	145	150	155	160
Asp	Thr	Pro	Cys	Asp	Cys	Ala	Glu	Lys	Gln	His	His	Lys	Asp	Leu	Ala	165	170	175	
Leu	Asn	Leu	Glu	Ser	Gln	Met	Val	Phe	Ser	Arg	Asp	Pro	Glu	Ala	Glu	180	185	190	
Glu	Ile	Glu	Ala	Glu	Tyr	Ala	Ala	Leu	Asp	Lys	Arg					195	200		

<210> 5637

<211> 825

<212> DNA

<213> Homo sapiens



&lt;400&gt; 5637

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 120  
 ccaggtactc agggccctgc cctcgtggcc ttgtccgctc gccgcgggtg gggctggcac  
 180  
 aaggcccgtt ttggaggaag tggaggctcc caggagaaag gcagtggctg tgatcgacac  
 240  
 gcccaggctc tgccctgcac tgccctggac cacgaggctg cccaccccag acaggtggga  
 300  
 cccctttccc gcatgcagac tctgagcagc agcttctgtg gacccccacc gcgtcctgct  
 360  
 cctcaggctc atgccctgcg ggaacagaag ccaagaccgc gtagaaaatc caaggtgttt  
 420  
 aaatataaat aagagcgatt cccacagccc cacggtgctg gccagcctca caggtgcccg  
 480  
 ctggttctgt gacccatccc aggcacacgc tcccctggct gggcgccctg ccagggctcc  
 540  
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 600  
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 660  
 ggagctgctg actgtgtcag agcccggctg cccagcgccc cggcgccctc cctccagctg  
 720  
 cccagcctgg gatccgtccg ctgtctgtct cctgaaccag ggagtctgac ccactcacag  
 780  
 ctcccatggg gtccgtgcag ccaaggcccc gcagccacac tcaact  
 825

&lt;210&gt; 5638

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5638

Met	Pro	Cys	Gly	Asn	Arg	Ser	Gln	Asp	Pro	Val	Glu	Asn	Pro	Arg	Cys
1				5					10					15	
Leu	Asn	Ile	Asn	Lys	Ser	Asp	Ser	His	Ser	Pro	Thr	Val	Leu	Ala	Ser
			20					25					30		
Leu	Thr	Gly	Ala	Arg	Trp	Phe	Cys	Asp	Pro	Ser	Gln	Ala	His	Ala	Pro
		35					40					45			
Leu	Ala	Gly	Arg	Leu	Ala	Arg	Ala	Pro	Leu	Trp	Leu	Ala	Cys	Gly	Asp
	50					55				60					
Thr	Trp	Ala	Leu	Leu	His	Val	Pro	Thr	Arg	Ala	Val	Ala	Gly	Ser	Lys
65					70				75					80	
Glu	Ala	Gln	Pro	Arg	Pro	Ala	Cys	Val	Asp	Pro	Ala	Gly	Leu	Arg	Ala
			85				90						95		
Pro	Glu	Leu	Leu	Thr	Val	Ser	Glu	Pro	Gly	Cys	Pro	Ala	Pro	Arg	Arg
		100					105					110			
Pro	Pro	Ser	Ser	Cys	Pro	Ala	Trp	Asp	Pro	Ser	Ala	Val	Cys	Leu	Leu
		115					120					125			
Asn	Gln	Gly	Val												

130

&lt;210&gt; 5639

&lt;211&gt; 2433

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5639

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ccaacaatta ttgcagcaca taatcaatat aaacattata tatatgaact atttgacact  
120  
atttgacatt tcttcttcca catccagtgt atctgacatt tagcgcacat ttgatttgca  
180  
ctcaccact ttgaggagct caattgccgc ttaagtccgt ggctagtggc tgccctaaaag  
240  
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300  
gcatgaccg gcctgaagta gcggcggaac ggaagtcgct tgtgtatgaa cgcagcggcg  
360  
gacctgtgag gggatccgac ttgccggcag aacttacgct gcgggacccc gggcactgtt  
420  
gctgctgcgg gagactgtgg gctgtttagt gccatgcacc ctttacagtg tgtcctccaa  
480  
gtgcagaggt ctctgggggtg gggaccattg gcctctgtgt cttggctgtc gctgaggatg  
540  
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600  
ggagctcgga aggatttcag ctccaggctg gctgctggac cgacttttca acatttttta  
660  
aaaagtgcct cagctcctca ggagaagctg tcttcagaag tggaagaccc acctccctat  
720  
ctcatgatgg atgaacttct tggaaggcag agaaaagtct acctcgagac ctatggctgc  
780  
cagatgaatg tgaatgacac agagatagcc tgggccatct tacagaagag tggctacctg  
840  
cggccagtaa cctccaaggc agatgtgatt ctcttgtca cgtgctctat caggggagaag  
900  
gctgagcaga ccatctggaa ccgtttacat cagcttaaag ccttgaagac aaggcggccc  
960  
cgctcccggg ttctcttgag gattggaatt ctaggctgca tggctgagag gttgaaggag  
1020  
gagatttca acagagagaa aatggtagat attttggtg gtctgatgc ctaccgggac  
1080  
cttccccggc tgctggctgt tgctgagtcg ggccagcaag ctgccaacgt gctgctctct  
1140  
ctggacgaga cctatgctga tgtcatgcca gtccagacaa gcgccagtgc cacgtctgcc  
1200  
tttgtgtcaa tcatgcgagg ctgtgacaac atgtgtagct actgcattgt tcctttcacc  
1260  
cggggcaggg agaggagtcg gcctattgcc tccattctag aggaagtga gaagctttct  
1320  
gagcaggggc tgaaagaagt gacacttctt ggtcagaatg ttaatagttt tcgggacaat  
1380

tcggagggtcc agttcaacag tgcagtgcct accaatctca gtcgtgggtt taccaccaac  
 1440  
 tataaaacca agcaaggagg acttcgtttt gtcacatctt tggatcaggt ctccagagta  
 1500  
 gatcctgaaa tgaggatccg ttttacctct cccaccccca aggattttcc tgatgaggtt  
 1560  
 ctgcagctga ttcagtagag agataacatc tgtaaacaga tccacctgcc agcccagagt  
 1620  
 ggaagcagcc gtgtgttgga ggccatgcgg aggggatatt caagagaagc ttatgtggag  
 1680  
 ttagttcacc atattagaga atctattcca ggtgtgagcc tcagcagcga tttcattgct  
 1740  
 ggcttttgtg gtgagacgga ggaagatcac gtccagacag tctctttgct ccgggaagtt  
 1800  
 cagtacaaca tgggcttccct ctttgccctac agcatgagac agaagacacg ggcatatcat  
 1860  
 aggtgaagg atgatgtccc ggaagaggta aaattaaggc gtttgaggga actcatcact  
 1920  
 atcttccgag aagaagcaac aaaagccaat cagacctctg tgggctgtac ccagttggtg  
 1980  
 ctagtgaag ggctcagtaa acgctctgcc actgacctgt gtggcaggaa tgatggaaac  
 2040  
 cttaagggtga tcttccctga tgcagagatg gaggatgtca ataaccctgg gctcagggtc  
 2100  
 agagcccagc ctgggggacta tgtgctggtg aagatcacn ntcagccagt tctcagacac  
 2160  
 ttaggggaca tgttctctgc aggaccactc tgaggggactc ttctgcatat tgctgacctg  
 2220  
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 2280  
 tgccactgag gaaacaggtc atgaagggtg agataagctg caaggggcca agcaacttta  
 2340  
 tgtcagtga aaacgtgtct ctttaaagct gctatgtgaa cagcttttac agtcattaaa  
 2400  
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 2433

&lt;210&gt; 5640

&lt;211&gt; 540

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5640

Met Cys Pro Ser Pro Glu Arg Gln Glu Asp Gly Ala Arg Lys Asp Phe  
 1 5 10 15  
 Ser Ser Arg Leu Ala Ala Gly Pro Thr Phe Gln His Phe Leu Lys Ser  
 20 25 30  
 Ala Ser Ala Pro Gln Glu Lys Leu Ser Ser Glu Val Glu Asp Pro Pro  
 35 40 45  
 Pro Tyr Leu Met Met Asp Glu Leu Leu Gly Arg Gln Arg Lys Val Tyr  
 50 55 60  
 Leu Glu Thr Tyr Gly Cys Gln Met Asn Val Asn Asp Thr Glu Ile Ala  
 65 70 75 80  
 Trp Ser Ile Leu Gln Lys Ser Gly Tyr Leu Arg Pro Val Thr Ser Lys

	85		90		95
Ala Asp Val Ile Leu Leu Val Thr Cys Ser Ile Arg Glu Lys Ala Glu					
	100		105		110
Gln Thr Ile Trp Asn Arg Leu His Gln Leu Lys Ala Leu Lys Thr Arg					
	115		120		125
Arg Pro Arg Ser Arg Val Pro Leu Arg Ile Gly Ile Leu Gly Cys Met					
	130		135		140
Ala Glu Arg Leu Lys Glu Glu Ile Leu Asn Arg Glu Lys Met Val Asp					
	145		150		155
Ile Leu Ala Gly Pro Asp Ala Tyr Arg Asp Leu Pro Arg Leu Leu Ala					
	165		170		175
Val Ala Glu Ser Gly Gln Gln Ala Ala Asn Val Leu Leu Ser Leu Asp					
	180		185		190
Glu Thr Tyr Ala Asp Val Met Pro Val Gln Thr Ser Ala Ser Ala Thr					
	195		200		205
Ser Ala Phe Val Ser Ile Met Arg Gly Cys Asp Asn Met Cys Ser Tyr					
	210		215		220
Cys Ile Val Pro Phe Thr Arg Gly Arg Glu Arg Ser Arg Pro Ile Ala					
	225		230		235
Ser Ile Leu Glu Glu Val Lys Lys Leu Ser Glu Gln Gly Leu Lys Glu					
	245		250		255
Val Thr Leu Leu Gly Gln Asn Val Asn Ser Phe Arg Asp Asn Ser Glu					
	260		265		270
Val Gln Phe Asn Ser Ala Val Pro Thr Asn Leu Ser Arg Gly Phe Thr					
	275		280		285
Thr Asn Tyr Lys Thr Lys Gln Gly Gly Leu Arg Phe Ala His Leu Leu					
	290		295		300
Asp Gln Val Ser Arg Val Asp Pro Glu Met Arg Ile Arg Phe Thr Ser					
	305		310		315
Pro His Pro Lys Asp Phe Pro Asp Glu Val Leu Gln Leu Ile His Glu					
	325		330		335
Arg Asp Asn Ile Cys Lys Gln Ile His Leu Pro Ala Gln Ser Gly Ser					
	340		345		350
Ser Arg Val Leu Glu Ala Met Arg Arg Gly Tyr Ser Arg Glu Ala Tyr					
	355		360		365
Val Glu Leu Val His His Ile Arg Glu Ser Ile Pro Gly Val Ser Leu					
	370		375		380
Ser Ser Asp Phe Ile Ala Gly Phe Cys Gly Glu Thr Glu Glu Asp His					
	385		390		395
Val Gln Thr Val Ser Leu Leu Arg Glu Val Gln Tyr Asn Met Gly Phe					
	405		410		415
Leu Phe Ala Tyr Ser Met Arg Gln Lys Thr Arg Ala Tyr His Arg Leu					
	420		425		430
Lys Asp Asp Val Pro Glu Glu Val Lys Leu Arg Arg Leu Glu Glu Leu					
	435		440		445
Ile Thr Ile Phe Arg Glu Glu Ala Thr Lys Ala Asn Gln Thr Ser Val					
	450		455		460
Gly Cys Thr Gln Leu Val Leu Val Glu Gly Leu Ser Lys Arg Ser Ala					
	465		470		475
Thr Asp Leu Cys Gly Arg Asn Asp Gly Asn Leu Lys Val Ile Phe Pro					
	485		490		495
Asp Ala Glu Met Glu Asp Val Asn Asn Pro Gly Leu Arg Val Arg Ala					
	500		505		510
Gln Pro Gly Asp Tyr Val Leu Val Lys Ile Thr Xaa Gln Pro Val Leu					

515
520
525  
 Arg His Leu Gly Asp Met Phe Ser Ala Gly Pro Leu  
530
535
540

```
<210> 5641
<211> 293
<212> DNA
<213> Homo sapiens
```

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<400> 5641
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60
ttctgtggcc acgcgtccaa aaccaatcag gtcaactcgg gcggtgtgct gctgaggttg
120
caggtggggcg aggaggtgtg gctggctggg gcacccttg catccctgga gagccaggtg
180
aggagggcag atacaagcag aaattccagt cagtgttcac ggtcactcgg cagaccacc
240
agccccctgc acccaacagc ctgatcagat tcaacgcggg cctcaccaac ccg
293
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```
<210> 5642
<211> 87
<212> PRT
<213> Homo sapiens
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```

<400> 5642
Ala Ser His Thr Ala Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val
 1          5          10          15
Lys Val Val Thr Phe Cys Gly His Ala Ser Lys Thr Asn Gln Val Asn
          20          25          30
Ser Gly Gly Val Leu Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu
          35          40          45
Ala Gly Ala Pro Leu Ala Ser Leu Glu Ser Gln Val Arg Arg Ala Asp
          50          55          60
Thr Ser Arg Asn Ser Ser Gln Cys Ser Arg Ser Leu Gly Arg Pro Thr
65          70          75          80
Ser Pro Leu His Pro Thr Ala
          85

```

```
<210> 5643
<211> 1218
<212> DNA
<213> Homo sapiens
```

```
<400> 5643
nnacgcgtga ggagcctgag gcggcggcgg ggggtggctcc ggcgcgggtg gtctcggggg
60
caaaataaca tggcagccag acgaattaca caggagactt ttgatgctgt attacaagaa
120
aaagccaaac gatatcacat ggatgccagt ggtgaggctg taagcgaaac tcttcagttt
180
aaagctcaag atctcttaag ggcagtccca agatccagag cagagatgta tgatgacgtc
240
```

cacagcgatg gcagatactc cctcagtggg tctgtagctc actctagaga tgccggaaga  
 300  
 gaaggcctga gaagtgaagt atttccaggg ccttccttca gatcaagcaa cccttccatc  
 360  
 agtgatgaca gctactttcg caaagaatgt ggccgggacg tggaattttc tcaactctgat  
 420  
 tctcgggacc aggtcattgg ccaccggaaa ttggggcatt tccgtttctca ggactggaaa  
 480  
 tttgcgctcc gtggttcttg ggaacaagac tttggccatc cagttttctca agagtctct  
 540  
 tggtcacagg agtatagttt tggctcctct gcagttttgg gggactttgg atcttccagg  
 600  
 ctgattgaga aagagtgttt ggagaaggag agtcgggatt atgacgtgga ccatcctggg  
 660  
 gaggtgact ctgtgcttag gggcagcagt caagtccagg ccagaggtcg agctctaaac  
 720  
 atcgttgacc aggaaggttc cctcctagga aagggggaga ctcagggcct gctcacagct  
 780  
 aaggggggtg ttgggaaact tgtcacattg agaaatgtga gcacaaaaaa aatacccacc  
 840  
 gtgaatcgta ttactcccaa aactcagggc actaaccaaa tccagaaaaa cactccaagt  
 900  
 cctgatgtga ccctggggac aaaccaggg acagaagata tccagttccc cattcagaag  
 960  
 atccctctgg ggctggatct gaagaatctt cggctcccca gaagaaagat gagctttgac  
 1020  
 atcatagata agtctgatgt tttttcaaga tttgggatag aaataatcaa atgggcagga  
 1080  
 ttccacacca taaaattaga ttattaaatt tttcccaaac ttttccagac tctctttgaa  
 1140  
 cttgaaacag aaacctgtgc taaaatgctt gcctcattca aatgttcctt aaaaccagag  
 1200  
 cacagagatt tttgcttt  
 1218

&lt;210&gt; 5644

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5644

Trp	Glu	Gln	Asp	Phe	Gly	His	Pro	Val	Ser	Gln	Glu	Ser	Ser	Trp	Ser
1				5					10					15	
Gln	Glu	Tyr	Ser	Phe	Gly	Pro	Ser	Ala	Val	Leu	Gly	Asp	Phe	Gly	Ser
			20					25					30		
Ser	Arg	Leu	Ile	Glu	Lys	Glu	Cys	Leu	Glu	Lys	Glu	Ser	Arg	Asp	Tyr
		35					40					45			
Asp	Val	Asp	His	Pro	Gly	Glu	Ala	Asp	Ser	Val	Leu	Arg	Gly	Ser	Ser
		50				55					60				
Gln	Val	Gln	Ala	Arg	Gly	Arg	Ala	Leu	Asn	Ile	Val	Asp	Gln	Glu	Gly
65					70				75					80	
Ser	Leu	Leu	Gly	Lys	Gly	Glu	Thr	Gln	Gly	Leu	Leu	Thr	Ala	Lys	Gly
				85					90					95	
Gly	Val	Gly	Lys	Leu	Val	Thr	Leu	Arg	Asn	Val	Ser	Thr	Lys	Lys	Ile

```

          100          105          110
Pro Thr Val Asn Arg Ile Thr Pro Lys Thr Gln Gly Thr Asn Gln Ile
      115          120          125
Gln Lys Asn Thr Pro Ser Pro Asp Val Thr Leu Gly Thr Asn Pro Gly
      130          135          140
Thr Glu Asp Ile Gln Phe Pro Ile Gln Lys Ile Pro Leu Gly Leu Asp
      145          150          155          160
Leu Lys Asn Leu Arg Leu Pro Arg Arg Lys Met Ser Phe Asp Ile Ile
      165          170          175
Asp Lys Ser Asp Val Phe Ser Arg Phe Gly Ile Glu Ile Ile Lys Trp
      180          185          190
Ala Gly Phe His Thr Ile Lys Leu Asp Tyr
      195          200

```

<210> 5645  
 <211> 156  
 <212> DNA  
 <213> Homo sapiens

<400> 5645  
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 60  
 cctcagatca gcttcccctc tcccaggcaa gaggacacga gcactggcaa gttcacctgc  
 120  
 aaagtccccg gcctctacta ctttgtctac cacgcg  
 156

<210> 5646  
 <211> 52  
 <212> PRT  
 <213> Homo sapiens

```

<400> 5646
Pro Arg Pro Ser Arg Arg Arg Asn Cys Arg Trp Ala Val Phe Gly Leu
 1           5           10           15
Ala Gln Arg Cys Pro Gln Ile Ser Phe Pro Ser Pro Arg Gln Glu Asp
      20           25           30
Thr Ser Thr Gly Lys Phe Thr Cys Lys Val Pro Gly Leu Tyr Tyr Phe
      35           40           45
Val Tyr His Ala
      50

```

<210> 5647  
 <211> 150  
 <212> DNA  
 <213> Homo sapiens

<400> 5647  
 cccatggggc cgggcaccct ggcattccca gggggtccca tggggccatt tttcccagga  
 60  
 aggcccaagg gggagccagg aatcccagcc attcccggga tccgaggacc caaagggcag  
 120  
 aagggagaac ccggcttacc cggccatccn  
 150

<210> 5648  
 <211> 50  
 <212> PRT  
 <213> Homo sapiens

<400> 5648  
 Pro Met Gly Pro Gly Thr Leu Ala Phe Pro Gly Gly Pro Met Gly Pro  
 1 5 10 15  
 Phe Phe Pro Gly Arg Pro Lys Gly Glu Pro Gly Ile Pro Ala Ile Pro  
 20 25 30  
 Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu Pro Gly  
 35 40 45  
 His Pro  
 50

<210> 5649  
 <211> 345  
 <212> DNA  
 <213> Homo sapiens

<400> 5649  
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 60  
 aaccgcctgg tccctcgat cgcgcccagc ccagactcgg actcggacac agactcggag  
 120  
 gaccgagtc tccggcgag cgcggggcgc ttgctccgct cgcaggatcat ccacagcggg  
 180  
 cacttcatgg tgctgctgcc gcacagcgac tgcgtgcccc ggcggcgcca ccaggagggg  
 240  
 ccgtggggcc ctccgacttc gggccgcgca gtatcgaccc cacactcaca cgcctcttcg  
 300  
 agtgcttgag cctggcctac agtggcaagc tgggggtctcc caagt  
 345

<210> 5650  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 5650  
 Met Ala Val Ala Ala Thr Ala Trp Ser Leu Gly Ser Arg Pro Ala  
 1 5 10 15  
 Gln Thr Arg Thr Arg Thr Gln Thr Arg Thr Arg Val Ser Gly Ala  
 20 25 30  
 Ala Arg Ala Ala Cys Ser Ala Arg Ser Ser Thr Ala Val Thr Ser  
 35 40 45  
 Trp Cys Arg Arg Arg Thr Ala Thr Arg Cys Pro Gly Gly Ala Thr Arg  
 50 55 60  
 Arg Val Arg Gly Ala Leu Arg Leu Arg Ala Ala Gln Tyr Arg Pro His  
 65 70 75 80  
 Thr His Thr Pro Leu Arg Val Leu Glu Pro Gly Leu Gln Trp Gln Ala  
 85 90 95  
 Gly Val Ser Gln



100

<210> 5651  
 <211> 615  
 <212> DNA  
 <213> Homo sapiens

<400> 5651  
 ctcgaggaat attgggtctt ctgcgcggcc gtagagctcc gccaaagtgcg cctgcgcgga  
 60  
 ggagaagtgg cgtcagagtc gcccgggcag tagaggaaat tgcggtagtg accctcgggc  
 120  
 ctcgccatga agagccgctt tagcaccatt gacctccgcg ccgtactcgc ggagctgaat  
 180  
 gctagcttgc taggaatgag agtaaacaat gtttatgatg tggataataa gacatacctt  
 240  
 attcgtcttc aaaaaccgga ctttaaagct acactttttac ttgaatctgg catacaaatt  
 300  
 catacaacag aatttgagtgc gctaagaat atgatgccgt ctagttttgc catgaagtgc  
 360  
 cgaaaacatt tgaagagtcg gagattagtc agtgcaaaac agcttggtgt ggatagaatt  
 420  
 gtagattttc aatttggaag tgatgaagct gcttaccatt taatcattga gctctatgat  
 480  
 agggggaaca ttgttcttac agattatgag tacgtaattt taaatattct aaggtttcga  
 540  
 actgatgagg cagatgatgt taaatttgct gttcgtgaac gctatccact tgatcatgct  
 600  
 agagctgctg aacct  
 615

<210> 5652  
 <211> 163  
 <212> PRT  
 <213> Homo sapiens

<400> 5652  
 Met Lys Ser Arg Phe Ser Thr Ile Asp Leu Arg Ala Val Leu Ala Glu  
 1 5 10 15  
 Leu Asn Ala Ser Leu Leu Gly Met Arg Val Asn Asn Val Tyr Asp Val  
 20 25 30  
 Asp Asn Lys Thr Tyr Leu Ile Arg Leu Gln Lys Pro Asp Phe Lys Ala  
 35 40 45  
 Thr Leu Leu Leu Glu Ser Gly Ile Gln Ile His Thr Thr Glu Phe Glu  
 50 55 60  
 Trp Pro Lys Asn Met Met Pro Ser Ser Phe Ala Met Lys Cys Arg Lys  
 65 70 75 80  
 His Leu Lys Ser Arg Arg Leu Val Ser Ala Lys Gln Leu Gly Val Asp  
 85 90 95  
 Arg Ile Val Asp Phe Gln Phe Gly Ser Asp Glu Ala Ala Tyr His Leu  
 100 105 110  
 Ile Ile Glu Leu Tyr Asp Arg Gly Asn Ile Val Leu Thr Asp Tyr Glu  
 115 120 125  
 Tyr Val Ile Leu Asn Ile Leu Arg Phe Arg Thr Asp Glu Ala Asp Asp

130	135	140
Val Lys Phe Ala Val	Arg Glu Arg Tyr Pro Leu	Asp His Ala Arg Ala
145	150	155
Ala Glu Pro		160

<210> 5653  
 <211> 1439  
 <212> DNA  
 <213> Homo sapiens

<400> 5653  
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 60  
 caccttctgt ggccacacgt ccaaaaccaa tcagggtcaac tcgggcgggtg tgctgctgag  
 120  
 gttgcagggtg aacttgccag tgctcgtgtc ataattctccc tgcgggttgg tgaggaccgc  
 180  
 gttgaatctg atcaggctgt tgggtgcagg gggctgggtg gtctgccgag tgaccactca  
 240  
 gacaccgtgt cctcttgccct gggagagggg aagcagatct gaggacatct ctgtgccagg  
 300  
 ccagaaaccg ccacactgca ggtgaggccc ggaccctgc ccagttcctt ctccgggatg  
 360  
 gacgtggggc ccagctccct gcccacctt gggctgaagc tgctgctgct cctgctgctg  
 420  
 ctgcccctca ggggccaagc caacacaggc tgctacggga tcccagggat gcccggcctg  
 480  
 cccggggcac caggggaagga tgggtacgac ggactgccgg ggcccaaggg ggagccagga  
 540  
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 600  
 ggccatcctg ggaaaaatgg ccccatggga cccctggga tgccaggggt gcccggcccc  
 660  
 atgggcatcc ctggagagcc aggtgaggag ggcagataca agcagaaatt ccagtcagtg  
 720  
 ttcacggtca ctggcagac ccaccagccc cctgcacca acagcctgat cagattcaac  
 780  
 gcggtcctca ccaaccgcga gggagattat gacacgagca ctggcaagtt cacctgcaaa  
 840  
 gtccccggcc tctactactt tgtctaccac gcgtcgcata cagccaacct gtgcgtgctg  
 900  
 ctgtaccgca gcggcgtcaa agtggtcacc ttctgtggcc acacgtccaa aaccaatcag  
 960  
 gtcaactcgg gcggtgtgct gctgaggttg caggtgggcg aggaggtgtg gctggctgtc  
 1020  
 aatgactact acgacatggg gggcatccag ggctctgaca gcgtcttctc cggcttctctg  
 1080  
 ctcttccccg actagggcgg gcagatgcgc tcgagcccca cgggccttcc acctccctca  
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 gcttctgca tggaccacc ttactggcca gtctgcatcc ttgcctagac cattctcccc  
 1200  
 accagatgga cttctctctc agggagccca cctgaccca ccccactgc accccctccc  
 1260

catgggttct ctccttcctc tgaacttctt taggagtcac tgcttggtg gttcctggga  
 1320  
 cacttaacca atgccttctg gtactgccat tctttttttt ttttttcaag tattggaagg  
 1380  
 ggtggggaga tatataaata aatcatgaaa tcaataaaaa aaaaaaaaaa aaaaaaaaaa  
 1439

<210> 5654  
 <211> 245  
 <212> PRT  
 <213> Homo sapiens

<400> 5654  
 Met Asp Val Gly Pro Ser Ser Leu Pro His Leu Gly Leu Lys Leu Leu  
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 Leu Leu Leu Leu Leu Leu Pro Leu Arg Gly Gln Ala Asn Thr Gly Cys  
 20 25 30  
 Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp  
 35 40 45  
 Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala  
 50 55 60  
 Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu  
 65 70 75 80  
 Pro Gly His Pro Gly Lys Asn Gly Pro Met Gly Pro Pro Gly Met Pro  
 85 90 95  
 Gly Val Pro Gly Pro Met Gly Ile Pro Gly Glu Pro Gly Glu Glu Gly  
 100 105 110  
 Arg Tyr Lys Gln Lys Phe Gln Ser Val Phe Thr Val Thr Arg Gln Thr  
 115 120 125  
 His Gln Pro Pro Ala Pro Asn Ser Leu Ile Arg Phe Asn Ala Val Leu  
 130 135 140  
 Thr Asn Pro Gln Gly Asp Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys  
 145 150 155 160  
 Lys Val Pro Gly Leu Tyr Tyr Phe Val Tyr His Ala Ser His Thr Ala  
 165 170 175  
 Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val Lys Val Val Thr Phe  
 180 185 190  
 Cys Gly His Thr Ser Lys Thr Asn Gln Val Asn Ser Gly Gly Val Leu  
 195 200 205  
 Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu Ala Val Asn Asp Tyr  
 210 215 220  
 Tyr Asp Met Val Gly Ile Gln Gly Ser Asp Ser Val Phe Ser Gly Phe  
 225 230 235 240  
 Leu Leu Phe Pro Asp  
 245

<210> 5655  
 <211> 3810  
 <212> DNA  
 <213> Homo sapiens

<400> 5655  
 gatctgttgg aggaggatga gctgctagag cagaagtctt aggaggcggt gggccaggca  
 60

gggnngccat ctccatcanc ctccaaggct gagctggcag aggtgaggcg agaatgggcc  
120  
aagtacatgg aagtccatga gaaggcctcc ttcaccaata gtgagctgca ccgtgccatg  
180  
aacctgcacg tcggcaacct gcgcctgctc agcggggccgc ttgaccaggt ccggggtgcc  
240  
ctgcccacac cggccctctc cccagaggac aaggccgtgc tgcaaaacct aaagcgcac  
300  
ctggctaagg tgcaggagat gcgggaccag cgcgtgtccc tggagcagca gctgcgtgag  
360  
cttatccaga aagatgacat cactgcctcg ctggtcacca cagaccactc agagatgaag  
420  
aagttgttcg aggagcagct gaaaaagtat gaccagctga aggtgtacct ggagcagaac  
480  
ctggccgccc aggaccgtgt cctctgtgca ctgacagagg ccaacgtgca gtacgcagcc  
540  
gtgcggcggg tactcagcga cttggaccaa aagtggaaact ccacgctgca gaccctggtg  
600  
gcctcgtatg aagcctatga ggacctgatg aagaagtcgc aggagggcag ggacttctac  
660  
gcagatctgg agagcaagggt ggctgctctg ctggagcgca cgcagtccac ctgccaggcc  
720  
cgcgaggctg cccgccagca gctcctggac agggagctga agaagaagcc gccgccacgg  
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900  
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960  
acaggcccag gacccccacta tctctcaggc cccttgcccc ctggtacctt ctcgggcccc  
1020  
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1080  
gccctctacc cagccccctg ctacacaccg gagctgggcc ttgtgccccg atcctcccca  
1140  
cagcatggcg tggtagcag tccctatgtg ggggtagggc cggccccacc agttgcagg  
1200  
ctccccctcg cccacctcc tcaattctca gggcccgagt tggccatggc ggttcggcca  
1260  
gccaccacca cagtagatag catccaggcg cccatcccca gccacacagc cccacggcca  
1320  
aaccacccc ctgctcctcc cccgccctgc ttccctgtgc cccaccgca gccactgccc  
1380  
acgccttaca cctaccctgc aggggctaag caaccatcc cagcacagca ccacttctct  
1440  
tctgggatcc ccacaggttt tccagcccca aggattgggc cccagcccca gcccctcct  
1500  
cagccccatc cttcacaagc gtttgggcct cagccccac agcagccct tccactccag  
1560  
catccacatc tcttcccacc ccaggcccca ggactcctac cccacaatc cccctacccc  
1620  
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1680

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<210> 5656

<211> 987

<212> PRT

<213> Homo sapiens

<400> 5656

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Ala	Glu	Val	Arg	Arg	Glu	Trp	Ala	Lys	Tyr	Met	Glu	Val	His	Glu	Lys
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Ala	Ser	Phe	Thr	Asn	Ser	Glu	Leu	His	Arg	Ala	Met	Asn	Leu	His	Val
			50				55				60				
Gly	Asn	Leu	Arg	Leu	Leu	Ser	Gly	Pro	Leu	Asp	Gln	Val	Arg	Ala	Ala
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Leu	Pro	Thr	Pro	Ala	Leu	Ser	Pro	Glu	Asp	Lys	Ala	Val	Leu	Gln	Asn
				85					90					95	
Leu	Lys	Arg	Ile	Leu	Ala	Lys	Val	Gln	Glu	Met	Arg	Asp	Gln	Arg	Val
			100					105					110		
Ser	Leu	Glu	Gln	Gln	Leu	Arg	Glu	Leu	Ile	Gln	Lys	Asp	Asp	Ile	Thr
			115				120					125			
Ala	Ser	Leu	Val	Thr	Thr	Asp	His	Ser	Glu	Met	Lys	Lys	Leu	Phe	Glu
			130				135					140			
Glu	Gln	Leu	Lys	Lys	Tyr	Asp	Gln	Leu	Lys	Val	Tyr	Leu	Glu	Gln	Asn
145					150					155					160
Leu	Ala	Ala	Gln	Asp	Arg	Val	Leu	Cys	Ala	Leu	Thr	Glu	Ala	Asn	Val
				165					170					175	
Gln	Tyr	Ala	Ala	Val	Arg	Arg	Val	Leu	Ser	Asp	Leu	Asp	Gln	Lys	Trp
			180					185					190		
Asn	Ser	Thr	Leu	Gln	Thr	Leu	Val	Ala	Ser	Tyr	Glu	Ala	Tyr	Glu	Asp
			195				200					205			
Leu	Met	Lys	Lys	Ser	Gln	Glu	Gly	Arg	Asp	Phe	Tyr	Ala	Asp	Leu	Glu
			210				215					220			
Ser	Lys	Val	Ala	Ala	Leu	Leu	Glu	Arg	Thr	Gln	Ser	Thr	Cys	Gln	Ala

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Arg	Glu	Ala	Ala	Arg	Gln	Gln	Leu	Leu	Asp	Arg	Glu	Leu	Lys	Lys	Lys
				245					250					255	
Pro	Pro	Pro	Arg	Pro	Thr	Ala	Pro	Lys	Pro	Leu	Leu	Pro	Arg	Arg	Glu
			260					265					270		
Glu	Ser	Glu	Ala	Val	Glu	Ala	Gly	Asp	Pro	Pro	Glu	Glu	Leu	Arg	Ser
		275					280					285			
Leu	Pro	Pro	Asp	Met	Val	Ala	Gly	Pro	Arg	Leu	Pro	Asp	Thr	Phe	Leu
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Gly	Ser	Ala	Thr	Pro	Leu	His	Phe	Pro	Pro	Ser	Pro	Phe	Pro	Ser	Ser
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Thr	Gly	Pro	Gly	Pro	His	Tyr	Leu	Ser	Gly	Pro	Leu	Pro	Pro	Gly	Thr
			325						330					335	
Tyr	Ser	Gly	Pro	Thr	Gln	Leu	Ile	Gln	Pro	Arg	Ala	Pro	Gly	Pro	His
		340						345					350		
Ala	Met	Pro	Val	Ala	Pro	Gly	Pro	Ala	Leu	Tyr	Pro	Ala	Pro	Ala	Tyr
		355					360					365			
Thr	Pro	Glu	Leu	Gly	Leu	Val	Pro	Arg	Ser	Ser	Pro	Gln	His	Gly	Val
	370					375					380				
Val	Ser	Ser	Pro	Tyr	Val	Gly	Val	Gly	Pro	Ala	Pro	Pro	Val	Ala	Gly
385					390					395					400
Leu	Pro	Ser	Ala	Pro	Pro	Pro	Gln	Phe	Ser	Gly	Pro	Glu	Leu	Ala	Met
			405						410					415	
Ala	Val	Arg	Pro	Ala	Thr	Thr	Thr	Val	Asp	Ser	Ile	Gln	Ala	Pro	Ile
		420						425					430		
Pro	Ser	His	Thr	Ala	Pro	Arg	Pro	Asn	Pro	Thr	Pro	Ala	Pro	Pro	Pro
		435					440					445			
Pro	Cys	Phe	Pro	Val	Pro	Pro	Pro	Gln	Pro	Leu	Pro	Thr	Pro	Tyr	Thr
	450					455					460				
Tyr	Pro	Ala	Gly	Ala	Lys	Gln	Pro	Ile	Pro	Ala	Gln	His	His	Phe	Ser
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Ser	Gly	Ile	Pro	Thr	Gly	Phe	Pro	Ala	Pro	Arg	Ile	Gly	Pro	Gln	Pro
			485						490					495	
Gln	Pro	His	Pro	Gln	Pro	His	Pro	Ser	Gln	Ala	Phe	Gly	Pro	Gln	Pro
			500					505					510		
Pro	Gln	Gln	Pro	Leu	Pro	Leu	Gln	His	Pro	His	Leu	Phe	Pro	Pro	Gln
		515					520					525			
Ala	Pro	Gly	Leu	Leu	Pro	Pro	Gln	Ser	Pro	Tyr	Pro	Tyr	Ala	Pro	Gln
	530					535					540				
Pro	Gly	Val	Leu	Gly	Gln	Pro	Pro	Pro	Pro	Leu	His	Thr	Gln	Leu	Tyr
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Pro	Gly	Pro	Ala	Gln	Asp	Pro	Leu	Pro	Ala	His	Ser	Gly	Ala	Leu	Pro
			565						570					575	
Phe	Pro	Ser	Pro	Gly	Pro	Pro	Gln	Pro	Pro	His	Pro	Pro	Leu	Ala	Tyr
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 Ala Ala Glu Gly Arg Arg Pro Gln Ala Leu Arg Leu Ile Glu Arg Asp  
 690 695 700  
 Pro Tyr Glu His Pro Glu Arg Leu Arg Gln Leu Gln Gln Glu Leu Glu  
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 Ala Phe Arg Gly Gln Leu Gly Asp Val Gly Ala Leu Asp Thr Val Trp  
 725 730 735  
 Arg Glu Leu Gln Asp Ala Gln Glu His Asp Ala Arg Gly Arg Ser Ile  
 740 745 750  
 Ala Ile Ala Arg Cys Tyr Ser Leu Lys Asn Arg His Gln Asp Val Met  
 755 760 765  
 Pro Tyr Asp Ser Asn Arg Val Val Leu Arg Ser Gly Lys Asp Asp Tyr  
 770 775 780  
 Ile Asn Ala Ser Cys Val Glu Gly Leu Ser Pro Tyr Cys Pro Pro Leu  
 785 790 795 800  
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 820 825 830  
 Ala Glu Met Glu Lys Gln Lys Val Ala Arg Tyr Phe Pro Thr Glu Arg  
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 Arg Ser Thr Glu Thr His Val Glu Arg Val Leu Ser Leu Gln Phe Arg  
 865 870 875 880  
 Asp Gln Ser Leu Lys Arg Ser Leu Val His Leu His Phe Pro Thr Trp  
 885 890 895  
 Pro Glu Leu Gly Leu Pro Asp Ser Pro Ser Asn Leu Leu Arg Phe Ile  
 900 905 910  
 Gln Glu Val His Ala His Tyr Leu His Gln Arg Pro Leu His Thr Pro  
 915 920 925  
 Ile Ile Val His Cys Ser Ser Gly Val Gly Arg Thr Gly Ala Phe Ala  
 930 935 940  
 Leu Leu Tyr Ala Ala Val Gln Glu Val Glu Ala Gly Asn Gly Ile Pro  
 945 950 955 960  
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 Leu Gln Glu Lys Leu His Leu Arg Xaa Leu Leu  
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&lt;210&gt; 5657

&lt;211&gt; 1020

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5657

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 180



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<210> 5658

<211> 301

<212> PRT

<213> Homo sapiens

<400> 5658

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			20					25					30		
Ile	Arg	Leu	Ser	Arg	Asp	Ala	Val	Lys	Asp	Phe	Asp	Cys	Cys	Cys	Leu
		35					40					45			
Ser	Leu	Gln	Pro	Cys	His	Asp	Pro	Val	Val	Thr	Pro	Asp	Gly	Tyr	Leu
		50				55					60				
Tyr	Glu	Arg	Glu	Ala	Ile	Leu	Glu	Tyr	Ile	Leu	His	Gln	Lys	Lys	Glu
65					70				75					80	
Ile	Ala	Arg	Gln	Met	Lys	Ala	Tyr	Glu	Lys	Gln	Arg	Gly	Thr	Arg	Arg
			85					90					95		
Glu	Glu	Gln	Lys	Glu	Leu	Gln	Arg	Ala	Ala	Ser	Gln	Asp	His	Val	Arg
			100					105					110		
Gly	Phe	Leu	Glu	Lys	Glu	Ser	Ala	Ile	Val	Ser	Arg	Pro	Leu	Asn	Pro
		115					120					125			
Phe	Thr	Ala	Lys	Ala	Leu	Ser	Gly	Thr	Ser	Pro	Asp	Asp	Val	Gln	Pro
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Gly	Pro	Ser	Val	Gly	Pro	Pro	Ser	Lys	Asp	Lys	Asp	Lys	Val	Leu	Pro

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 Ser Phe Trp Ile Pro Ser Leu Thr Pro Glu Ala Lys Ala Thr Lys Leu  
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 Glu Lys Pro Ser Arg Thr Val Thr Cys Pro Met Ser Gly Lys Pro Leu  
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 Arg Met Ser Asp Leu Thr Pro Val His Phe Thr Pro Leu Asp Ser Ser  
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 Val Asp Arg Val Gly Leu Ile Thr Arg Ser Glu Arg Tyr Val Cys Ala  
                                  210                      215                      220  
 Val Thr Arg Asp Ser Leu Ser Asn Ala Thr Pro Cys Ala Val Leu Arg  
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 Pro Ser Gly Ala Val Val Thr Leu Glu Cys Val Glu Lys Leu Ile Arg  
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 Lys Asp Met Val Asp Pro Val Thr Gly Asp Lys Leu Thr Asp Arg Asp  
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 Ile Ile Val Leu Gln Arg Gly Gly Thr Gly Phe Ala Gly Ser Gly Val  
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<210> 5659

<211> 1263

<212> DNA

<213> Homo sapiens

<400> 5659

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 1260  
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 1263

<210> 5660  
 <211> 253  
 <212> PRT  
 <213> Homo sapiens

<400> 5660  
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 Lys Asp Leu Ser Ile Ser Arg Leu Leu Ser Gln Thr Phe Arg Gly Lys  
 35 40 45  
 Glu Asn Asp Thr Asp Leu Asp Leu Arg Tyr Asp Thr Pro Glu Pro Tyr  
 50 55 60  
 Ser Glu Gln Asp Leu Trp Asp Trp Leu Arg Asn Ser Thr Asp Leu Gln  
 65 70 75 80  
 Glu Pro Arg Pro Arg Ala Lys Arg Arg Pro Ile Val Lys Thr Gly Lys  
 85 90 95  
 Phe Lys Lys Met Phe Gly Trp Gly Asp Phe His Ser Asn Ile Lys Thr  
 100 105 110  
 Val Lys Leu Asn Leu Leu Ile Thr Gly Lys Ile Val Asp His Gly Asn  
 115 120 125  
 Gly Thr Phe Ser Val Tyr Phe Arg His Asn Ser Thr Gly Gln Gly Asn  
 130 135 140  
 Val Ser Val Ser Leu Val Pro Pro Thr Lys Ile Val Glu Phe Asp Leu  
 145 150 155 160  
 Ala Gln Gln Thr Val Ile Asp Ala Lys Asp Ser Lys Ser Phe Asn Cys  
 165 170 175  
 Arg Ile Glu Tyr Glu Lys Val Asp Lys Ala Thr Lys Asn Thr Leu Cys  
 180 185 190  
 Asn Tyr Asp Pro Ser Lys Thr Cys Tyr Gln Glu Gln Thr Gln Ser His  
 195 200 205  
 Val Ser Trp Leu Cys Ser Lys Pro Phe Lys Val Ile Cys Ile Tyr Ile  
 210 215 220  
 Ser Phe Tyr Ser Thr Asp Tyr Lys Leu Val Gln Lys Val Cys Pro Asp  
 225 230 235 240  
 Tyr Asn Tyr His Ser Asp Thr Pro Tyr Phe Pro Ser Gly

245

250

&lt;210&gt; 5661

&lt;211&gt; 578

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5661

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120

ataacccagt gcacggcaag gacccagcag gaagcaccag ccactggccc cgacctcccg  
180

cacccaggac ctgacgggca cttagacaca cacagtggcc tgagctccaa ctccagcatg  
240

accacgctgg agcttcagca gtactggcag aaccagaaat gccgctggaa gcacgtcaaa  
300

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360

gggaaatcaa ggcttgaga gatgacttat ccagggtcac gtggcgagac agggacagca  
420

ccagaaccag acccgagatg tccacgtcaa agtgacatgc tctgagaggc agcacacaca  
480

gaataaccct gcatccaaat tccaggaagc tcttaggggt catccagctg ggcttagggg  
540

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578

&lt;210&gt; 5662

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5662

Met Thr Leu Leu Pro Asp Pro Trp Thr His Thr Ala Leu Gly Thr Gly  
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Cys Leu Gly Ala Cys Lys Ser Arg Ala Pro Trp Glu Pro Trp Cys Met  
20 25 30

Gly Pro Ile Thr Gln Cys Thr Ala Arg Thr Gln Gln Glu Ala Pro Ala  
35 40 45

Thr Gly Pro Asp Leu Pro His Pro Gly Pro Asp Gly His Leu Asp Thr  
50 55 60

His Ser Gly Leu Ser Ser Asn Ser Ser Met Thr Thr Arg Glu Leu Gln  
65 70 75 80

Gln Tyr Trp Gln Asn Gln Lys Cys Arg Trp Lys His Val Lys Leu Leu  
85 90 95

Phe Glu Ile Ala Ser Ala Arg Ile Glu Glu Arg Lys Val Ser Lys Phe  
100 105 110

Val Met Gly Lys Ser Arg Pro Gly Glu Met Thr Tyr Pro Gly Ser Arg  
115 120 125

Gly Glu Thr Gly Thr Ala Pro Glu Pro Asp Pro Arg Cys Pro Arg Gln  
130 135 140

Ser Asp Met Leu

145

&lt;210&gt; 5663

&lt;211&gt; 857

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5663

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 120  
 agacaggagg ctgccgtggt caagaagggc caagccttga agtctcacgg caccctctgt  
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 240  
 ggctgtcttc accttcttta gttccttctg tagctcagac tcggccacca caacctctt  
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 360  
 atccagaggt agctggtgtc tatctagatc aggaatggag aacttcttgt agtacttctt  
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 660  
 acgccacttt ctcaacaagta gttcactcgt cttctcgtca tattcttcag ccatttctt  
 720  
 gccgtctggg aataaatagt gaaccttctt tctcccgctc tgcagcagcg cagtcttctg  
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 840  
 gccagccgc tgccatg  
 857

&lt;210&gt; 5664

&lt;211&gt; 203

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5664

Met	Ala	Val	Thr	Gly	Trp	Leu	Glu	Ser	Leu	Arg	Thr	Ala	Gln	Lys	Thr
1				5					10					15	
Ala	Leu	Leu	Gln	Asp	Gly	Arg	Arg	Lys	Val	His	Tyr	Leu	Phe	Pro	Asp
			20					25					30		
Gly	Lys	Glu	Met	Ala	Glu	Glu	Tyr	Asp	Glu	Lys	Thr	Ser	Glu	Leu	Leu
		35					40					45			
Val	Arg	Lys	Trp	Arg	Val	Lys	Ser	Ala	Leu	Gly	Ala	Met	Gly	Gln	Trp
	50					55				60					
Gln	Leu	Glu	Val	Gly	Asp	Pro	Ala	Pro	Leu	Gly	Ala	Gly	Asn	Leu	Gly

```

65          70          75          80
Pro Glu Leu Ile Lys Glu Ser Asn Ala Asn Pro Ile Phe Met Arg Lys
          85          90          95
Asp Thr Lys Met Ser Phe Gln Trp Arg Ile Arg Asn Leu Pro Tyr Pro
          100          105          110
Lys Asp Val Tyr Ser Val Ser Val Asp Gln Lys Glu Arg Cys Ile Ile
          115          120          125
Val Arg Thr Thr Asn Lys Lys Tyr Tyr Lys Lys Phe Ser Ile Pro Asp
          130          135          140
Leu Asp Arg His Gln Leu Pro Leu Asp Asp Ala Leu Leu Ser Phe Ala
          145          150          155          160
His Ala Asn Cys Thr Leu Ile Ile Ser Tyr Gln Lys Pro Lys Glu Val
          165          170          175
Val Val Ala Glu Ser Glu Leu Gln Lys Glu Leu Lys Lys Val Lys Thr
          180          185          190
Ala His Ser Asn Asp Gly Asp Cys Lys Thr Gln
          195          200

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<210> 5665  
 <211> 531  
 <212> DNA  
 <213> Homo sapiens

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<400> 5665
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120
cagcgccct ctgaagtcac ttgcttcacg gaggtgttac tgtctgctgc tggacagagc
180
atgatggggg ctgcaagggc tccctcaaac cctggactcc tccaacagag ggctcctggg
240
tgccaggtc agctctgccc tgcgtcggcc ccaggcgta gggaggggtgt ttaatcctgg
300
ccggggcctt cccgcaggt ggagcgcgtg tcgcaccgc tgctgcagca gcagtatgag
360
ctgtaccggg agcgcttgc gcagcgatgc gagcggcgcc cggaggagca ggtgctgtac
420
cacggcacga cggcaccggc agtgccctgac atctgcgccc acggcttcaa ccgcagcttc
480
tgcggccgca acgcccaggt ctacgggaag ggcgtgtatt tcgccaggcg c
531

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<210> 5666  
 <211> 79  
 <212> PRT  
 <213> Homo sapiens

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<400> 5666
Ser Trp Pro Gly Pro Ser Pro Gln Val Glu Arg Val Ser His Pro Leu
1          5          10          15
Leu Gln Gln Gln Tyr Glu Leu Tyr Arg Glu Arg Leu Leu Gln Arg Cys
20          25          30
Glu Arg Arg Pro Val Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro

```

	35		40		45	
Ala	Val	Pro	Asp	Ile	Cys	Ala
						His
						Gly
						Phe
						Asn
						Arg
						Ser
						Phe
						Cys
						Gly
	50				55	
Arg	Asn	Ala	Thr	Val	Tyr	Gly
						Lys
						Gly
						Val
						Tyr
						Phe
						Ala
						Arg
						Arg
65				70		75

&lt;210&gt; 5667

&lt;211&gt; 858

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5667

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60
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120
tttgagaagt taagaatgat ttccaaggaa atccgccaag ttgttcgaat gacttctgct
180
aacatggacc cagctatgat gtttcgacag aggtcactga gtcaaggaag cacaattca
240
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300
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360
agtctcgatg tagagacaga tgaggagaag ttccagatga tgtcattaca gntggagcct
420
gcatatggta cctgtgagta caagttttca tttatgtgac gctaaagagc acaacaaaat
480
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600
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taattctttt aaaaactgga tcattataga ggaggctttc tgtttgagaa catttttata
720
ttcatcccta aagagtaaac ataagtggaa tttttacctc tttttatttc atggataata
780
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840
aggtgccagt agtaaggt
858

```

&lt;210&gt; 5668

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5668

Xaa	Ser	Ala	Arg	Gly	Ser	Gln	Ser	Met	Gln	Pro	Pro	Ile	Ile	Pro	Leu
1				5				10				15			
Phe	Pro	Val	Val	Lys	Lys	Asp	Met	Thr	Phe	Leu	His	Glu	Gly	Asn	Asp
				20				25				30			
Ser	Lys	Val	Asp	Gly	Leu	Val	Asn	Phe	Glu	Lys	Leu	Arg	Met	Ile	Ser

[illegible]

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<210> 5669
<211> 1842
<212> DNA
<213> Homo sapiens
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<400> 5669
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120
gccatgatgc gcagctccat agagaggggc aaatgggtct tcttcagaa ctgccacctg
180
gcaccaagct ggatgccagc cctagaacgc ctcatcgagc acatcaaccc cgacaaggta
240
cacagggact tccgcctctg gctcaccagc ctgcccagca acaagttccc agtgtccatc
300
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360
aagtcctata gtagccttgg tgaagacttc ctcaactcct gccacaaggt gatggagttc
420
aagtctctgc tgctgtctct gtgcttgctc catgggaacg ccctggagcg ccgtaagttt
480
gggcccctgg gcttcaacat cccctatgag ttcacggatg gagatctgcg catctgcatc
540
agccagctca agatgttcct ggacgaatat gatgacatcc cctacaaggt cctcaagtac
600
acggcagggg agatcaatta cgggggcccgt gtcactgatg actgggaccg gcgctgcatc
660
atgaacatct tggaggactt ctacaaccct gacgtgctct ccctgagca cagctacagc
720
gcctcgggca tctaccacca gatcccgctt acctacgacc tccacggcta cctctctac
780
atcaagagcc tcccactcaa tgatatgcct gagatctttg gcctgcatga caatgccaac
840
atcacctttg ccgagaacga gacgttcgcc ctctcgggca ccatcatcca gctgcaaccc
900
aatcatctt ctgcaggcag ccagggcccg gaggagatag tggaggacgt caccctaaac
960

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1080					
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1140					
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1200					
tggagtgcc	aggcctaccc	atcgctcaag	cctctgtcat	catgggtcat	ggacctgctg
1260					
caacgcctgg	actttctgca	ggcctggatc	caagatggca	tcccagctgt	cttctggatc
1320					
agtggattct	tcttccccca	ggctttctta	acaggcactc	tgcagaattt	tgcccgcaaa
1380					
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1440					
gagttaacac	aaagacccca	agtaggggtgc	tatatccatg	gattattcct	ggaagggtgcc
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1560					
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1620					
ctgtgcccc	tctacaagac	actgactcgt	gctggaacac	tatcaaccac	aggacactct
1680					
accaactatg	tcattgctgt	ggagatcccc	acccatcagc	cccagcgaca	ctggataaag
1740					
cgtgggtgtg	ccctcatctg	tgccctggac	tactagactc	agacagaagg	gctggggcca
1800					
ttaaagctga	attttctaag	caaaaaaaaaa	aaaaaaaaaa	aa	
1842					

<210> 5670

<211> 591

<212> PRT

<213> Homo sapiens

<400> 5670

Phe	Val	Leu	Ser	Pro	Gly	Thr	Asp	Pro	Ala	Ala	Asp	Leu	Tyr	Lys	Phe
1				5					10					15	
Ala	Glu	Glu	Met	Lys	Phe	Ser	Lys	Lys	Leu	Ser	Ala	Ile	Ser	Leu	Gly
			20					25					30		
Gln	Gly	Gln	Gly	Pro	Arg	Ala	Glu	Ala	Met	Met	Arg	Ser	Ser	Ile	Glu
		35					40					45			
Arg	Gly	Lys	Trp	Val	Phe	Phe	Gln	Asn	Cys	His	Leu	Ala	Pro	Ser	Trp
	50					55					60				
Met	Pro	Ala	Leu	Glu	Arg	Leu	Ile	Glu	His	Ile	Asn	Pro	Asp	Lys	Val
65					70					75					80
His	Arg	Asp	Phe	Arg	Leu	Trp	Leu	Thr	Ser	Leu	Pro	Ser	Asn	Lys	Phe
			85						90					95	
Pro	Val	Ser	Ile	Leu	Gln	Asn	Gly	Ser	Lys	Met	Thr	Ile	Glu	Pro	Pro
			100					105					110		
Arg	Gly	Val	Arg	Ala	Asn	Leu	Leu	Lys	Ser	Tyr	Ser	Ser	Leu	Gly	Glu
		115					120					125			
Asp	Phe	Leu	Asn	Ser	Cys	His	Lys	Val	Met	Glu	Phe	Lys	Ser	Leu	Leu

130	135	140
Leu Ser Leu Cys Leu Phe His Gly Asn Ala Leu Glu Arg Arg Lys Phe		
145	150	155
Gly Pro Leu Gly Phe Asn Ile Pro Tyr Glu Phe Thr Asp Gly Asp Leu		160
	165	170
Arg Ile Cys Ile Ser Gln Leu Lys Met Phe Leu Asp Glu Tyr Asp Asp		175
	180	185
Ile Pro Tyr Lys Val Leu Lys Tyr Thr Ala Gly Glu Ile Asn Tyr Gly		190
	195	200
Gly Arg Val Thr Asp Asp Trp Asp Arg Arg Cys Ile Met Asn Ile Leu		205
	210	215
Glu Asp Phe Tyr Asn Pro Asp Val Leu Ser Pro Glu His Ser Tyr Ser		220
225	230	235
Ala Ser Gly Ile Tyr His Gln Ile Pro Pro Thr Tyr Asp Leu His Gly		240
	245	250
Tyr Leu Ser Tyr Ile Lys Ser Leu Pro Leu Asn Asp Met Pro Glu Ile		255
	260	265
Phe Gly Leu His Asp Asn Ala Asn Ile Thr Phe Ala Gln Asn Glu Thr		270
	275	280
Phe Ala Leu Leu Gly Thr Ile Gln Leu Gln Pro Lys Ser Ser Ser		285
	290	295
Ala Gly Ser Gln Gly Arg Glu Glu Ile Val Glu Asp Val Thr Gln Asn		300
305	310	315
Ile Leu Leu Lys Val Pro Glu Pro Ile Asn Leu Gln Trp Val Met Ala		320
	325	330
Lys Tyr Pro Val Leu Tyr Glu Glu Ser Met Asn Thr Val Leu Val Gln		335
	340	345
Glu Val Ile Arg Tyr Asn Arg Leu Leu Gln Val Ile Thr Gln Thr Leu		350
	355	360
Gln Asp Leu Leu Lys Ala Leu Lys Gly Leu Val Val Met Ser Ser Gln		365
	370	375
Leu Glu Leu Met Ala Ala Ser Leu Tyr Asn Asn Thr Val Pro Glu Leu		380
385	390	395
Trp Ser Ala Lys Ala Tyr Pro Ser Leu Lys Pro Leu Ser Ser Trp Val		400
	405	410
Met Asp Leu Leu Gln Arg Leu Asp Phe Leu Gln Ala Trp Ile Gln Asp		415
	420	425
Gly Ile Pro Ala Val Phe Trp Ile Ser Gly Phe Phe Phe Pro Gln Ala		430
	435	440
Phe Leu Thr Gly Thr Leu Gln Asn Phe Ala Arg Lys Phe Val Ile Ser		445
	450	455
Ile Asp Thr Ile Ser Phe Asp Phe Lys Val Met Phe Glu Ala Pro Ser		460
465	470	475
Glu Leu Thr Gln Arg Pro Gln Val Gly Cys Tyr Ile His Gly Leu Phe		480
	485	490
Leu Glu Gly Ala Arg Trp Asp Pro Glu Ala Phe Gln Leu Ala Glu Ser		495
	500	505
Gln Pro Lys Glu Leu Tyr Thr Glu Met Ala Val Ile Trp Leu Leu Pro		510
	515	520
Thr Pro Asn Arg Lys Ala Gln Asp Gln Asp Phe Tyr Leu Cys Pro Ile		525
	530	535
Tyr Lys Thr Leu Thr Arg Ala Gly Thr Leu Ser Thr Thr Gly His Ser		540
545	550	555
Thr Asn Tyr Val Ile Ala Val Glu Ile Pro Thr His Gln Pro Gln Arg		560



Glu Ala Ile Ser Gly Ile His Asp Gln Glu Asp Gly Glu Gln Cys Lys  
                             85                            90                            95  
 Ser Val Phe His Trp Asp Met Lys Ser Lys Asp Lys Glu Gly Ala Pro  
                             100                            105                            110  
 Asn Arg Gln Pro Leu Ala Asn Glu Arg Ala Tyr Trp Thr Gly Tyr Gly  
                             115                            120                            125  
 Glu Gly Asn Ala Trp Cys Pro Gly Ala Leu Pro Asp Pro Glu Ile Val  
                             130                            135                            140  
 Arg Met Val Glu Ala Arg Lys Ser Leu Gly Glu Glu Tyr Thr Glu Asp  
 145                            150                            155                            160  
 Tyr Glu Gln Pro Arg Gly Lys Gly Ser Phe Pro Ala Met Ile Thr Pro  
                             165                            170                            175  
 Ala Tyr Gln Arg Ala Lys Lys Ala Asn Gln Leu Ala Ser Gln Val Glu  
                             180                            185                            190  
 Tyr Lys Arg Gly His Asp Glu Arg Ile Ser Arg Phe Ser Thr Val Ala  
                             195                            200                            205  
 Asp Thr Pro Glu Leu Leu Arg Ser Lys Ala Trp Gly  
                             210                            215                            220

&lt;210&gt; 5673

&lt;211&gt; 1279

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5673

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 120  
 ccgagacgat aaaagaacag ttgggtgttt ataggatgcc ctcaaagtga gctggctaag  
 180  
 tgagctgggc tctaacttca ctcacaaatt tatagtacag ctaagaaggc cagtctgtcc  
 240  
 atgaaagggg gccgagacaa gacgagggcg gcctcttcca ggctgtgcc aagtgtcctt  
 300  
 ggggtcccg ccatgtccac acttctgcag catccgcaga acatgtggcc gggctcctgcc  
 360  
 cagcagcagg gacagccaag tgggaggcag gcatgggtga cacctgggga ggccccctgg  
 420  
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 480  
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 660  
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 840

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 900  
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 960  
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 1080  
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 1200  
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 1260  
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 1279

<210> 5674

<211> 81

<212> PRT

<213> Homo sapiens

<400> 5674

Leu	His	Ser	Gln	Ile	Tyr	Ser	Thr	Ala	Lys	Lys	Ala	Ser	Leu	Ser	Met
1				5					10					15	
Lys	Gly	Ser	Arg	Asp	Lys	Thr	Arg	Ala	Ala	Ser	Ser	Arg	Pro	Val	Pro
			20					25					30		
Ser	Val	Leu	Gly	Val	Pro	Pro	Trp	Ser	Thr	Leu	Leu	Gln	His	Pro	Gln
		35					40					45			
Asn	Met	Trp	Pro	Gly	Pro	Ala	Gln	Gln	Gln	Gly	Gln	Pro	Ser	Gly	Arg
	50					55					60				
Gln	Ala	Trp	Cys	Thr	Pro	Gly	Glu	Ala	Pro	Gly	Ala	Glu	Ala	Ala	Pro
65					70					75					80
Gln															

<210> 5675

<211> 1074

<212> DNA

<213> Homo sapiens

<400> 5675

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 120  
 gggctggggc aggggctgag gctgaaagca gcagcctgcc tagtgggtga cgccaggggc  
 180  
 cgggtgtaaca tggcaccgag gttggggcca cagcaatgtg tgggacgggtg ggggtgggctg  
 240  
 gggcccttgg ctccaagcat tagttctcca agctctggtc cgttctccta cctccttcaa  
 300  
 ggggcaccag ggctacaagg tggtagttga gtattggggc ccgactcctg gggcactgga  
 360

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 420  
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 720  
 cacagcagaa gcaggaggac cgccagcagg atgagcctag gagagcaagg ctctaccact  
 780  
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 840  
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 1074

<210> 5676

<211> 145

<212> PRT

<213> Homo sapiens

<400> 5676

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Ala	Thr	Ser	Gln	Gly	Cys	Arg	Ala	Gly	Gly	Arg	Cys	Gly	Trp	Ala	Cys
			20					25					30		
Ala	Cys	Phe	Arg	Arg	Gln	Gln	Asn	Arg	Thr	Gln	Pro	Ala	Val	Thr	Pro
		35					40					45			
His	Ser	Arg	Ser	Arg	Arg	Thr	Ala	Ser	Arg	Met	Ser	Leu	Gly	Glu	Gln
	50					55					60				
Gly	Ser	Thr	Thr	Gly	Leu	Thr	Leu	Gly	His	Arg	Ala	Pro	Ala	Pro	Trp
65					70				75						80
Gly	Met	Ser	Trp	His	Asn	His	Arg	Arg	Gln	Val	Asn	Arg	Ile	Lys	Ser
				85					90					95	
Arg	Gln	Cys	Leu	Ser	Met	Ser	Glu	Thr	Ala	Val	Ala	Arg	Ala	Trp	Pro
			100					105					110		
Arg	Ala	Ala	Gly	Pro	Ala	Leu	Ala	Ile	Ser	Pro	Gly	Leu	Ala	Arg	Gly
		115					120					125			
Gly	Leu	Gly	Leu	Thr	Pro	Arg	Thr	Arg	Cys	Pro	Gln	Arg	Val	Pro	His
	130					135					140				
Cys															
145															

<210> 5677

<211> 477

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5677

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120
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300
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360
ccagctggag aagaccacca atgctgagat gagggagggtg ctggctgagc tgctggagct
420
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477

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&lt;210&gt; 5678

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5678

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Met Ala Ser Leu Arg Leu Cys Ser Gly His Pro Ser Ser Ser Ser Ser
1           5           10           15
Ala Ser Thr Ser Leu Ile Ser Ala Leu Val Val Phe Ser Ser Trp Cys
20           25           30
Met Glu Trp Thr Ser Arg Tyr Phe His Met Gln Ile Arg Gly Arg Gly
35           40           45
Ser Gly Gly Cys Gly Lys Lys Ala Asn Trp Gly Arg Gln Gln Gly Phe
50           55           60
Ser Leu Glu Gln Thr Ser Ala Ala Cys Ala Leu Leu Gln Asp Leu His
65           70           75           80
Lys Ala Cys Ile Ala His Gly His Lys Gln Leu Leu Ser Glu Val Asn
85           90           95
Glu Trp Ile Pro Glu Arg Ala Ser Leu Leu His Leu Ala Phe Pro Thr
100          105          110
Ser Asn Pro Leu Gly Gln Arg Gly Gly Val Leu Pro Leu Leu His Gln
115          120          125
Cys Pro Phe Leu Pro Trp Ser Gln Ala Ala Ser Phe Gln His Arg Pro
130          135          140
Leu Gln Arg Gly Thr Ala Ala
145          150

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&lt;210&gt; 5679

&lt;211&gt; 665

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5679

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 60  
 gggaggatct accatgaaga aggtcaagaa gaaaagggtca gaggccagac gccaccggac  
 120  
 tccacctccc agcatgctgg ctccaattcc acctctcagc agcctagccc tgaatccaca  
 180  
 ccacagcagc ctagtcctga atccacacca cagcagccta gccctgaatc cacaccacag  
 240  
 cattccagcc ttgaaaccac ctcccggcag ccagcattcc aagcccttcc agcaccggaa  
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 360  
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 420  
 gccctcggaa ctgtggctgt ggctctgggg gctctaggag ctgcctacta catcactgaa  
 480  
 tccttgtgaa caagccccta ggcccacagt ctggcagacc tccaccagcc ccaggagttg  
 540  
 ataggtgatg gcgctgggag aagatgttca gaatatctca aaagccaagt ccagaagatc  
 600  
 cagtttccat caaaggggacc tctcttgtca ccaaaattta aaaaaagaaa aaaaaaacga  
 660  
 aaaaa  
 665

&lt;210&gt; 5680

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5680

Val	Gly	Arg	Ile	Tyr	His	Glu	Glu	Gly	Gln	Glu	Glu	Lys	Val	Arg	Gly
1				5					10					15	
Gln	Thr	Pro	Pro	Asp	Ser	Thr	Ser	Gln	His	Ala	Gly	Ser	Asn	Ser	Thr
		20						25					30		
Ser	Gln	Gln	Pro	Ser	Pro	Glu	Ser	Thr	Pro	Gln	Gln	Pro	Ser	Pro	Glu
		35						40					45		
Ser	Thr	Pro	Gln	Gln	Pro	Ser	Pro	Glu	Ser	Thr	Pro	Gln	His	Ser	Ser
		50				55					60				
Leu	Glu	Thr	Thr	Ser	Arg	Gln	Pro	Ala	Phe	Gln	Ala	Leu	Pro	Ala	Pro
65					70					75					80
Glu	Ile	Arg	Arg	Ser	Ser	Cys	Cys	Leu	Leu	Ser	Pro	Asp	Ala	Asn	Val
				85				90						95	
Lys	Ala	Ala	Pro	Gln	Ser	Arg	Lys	Ala	Glu	Asn	Leu	Gln	Glu	Asn	Pro
			100					105					110		
Pro	Val	Ile	Val	Thr	Arg	Val	Leu	Gln	Ala	Leu	Gly	Thr	Val	Ala	Val
		115					120					125			
Ala	Leu	Gly	Ala	Leu	Gly	Ala	Ala	Tyr	Tyr	Ile	Thr	Glu	Ser	Leu	
		130					135						140		

&lt;210&gt; 5681

&lt;211&gt; 1402

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



&lt;400&gt; 5681

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60  
gtcgggacct ggtttccggg catgagctga gagcaccacg ccgaggccac gagtatttca  
120  
tagacattga tggaagcaga aacccaaaact cttcccctgg agaatgcac cctcctttca  
180  
gagggctctc tgcaggaagg acaccgatta tggattggca acctggaccc caaaattacc  
240  
gaataccacc tcctcaagct cctccagaag tttggcaagg taaagcagtt tgacttcctc  
300  
ttccacaagt caggtgcttt ggagggacag cctcgaggct actgttttgt taactttgaa  
360  
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420  
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480  
aagattcttc caatcagtct cgagccatcc tcaagcactg agcctactca gtctaacct  
540  
agtgtcactg caaagataaa agccattgaa gcaaaactga aaatgatggc ggaaaatcct  
600  
gatgcagagt atccagcagc gcctgtttat tcctacttta agccaccaga taaaaaagg  
660  
actactccat attctagaac agcatggaaa tctcgaagat gatggttgtg aattactgta  
720  
gcagcaaaag caaattggtc tccacaccta aaatcgtctg cctgtgtact ttgtagatgt  
780  
gaatgggtact attcaacgga gcacaatcac atgttagcat ttggtaacat aatgtttttg  
840  
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900  
aatagcgttg tatcccaaatt tgtgatttga accctgggat gctctaattg gctgggttgg  
960  
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1020  
atattattta aatcaggaaa ctaaaaatat taacatctat taaaaaattg agcatttttc  
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tacgctcgtg tgtcttttac aacataaaga aaaagtaaaa ggcagggagg gaagtgagag  
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1320  
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1380  
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1402

&lt;210&gt; 5682

&lt;211&gt; 190

&lt;212&gt; PRT

<213> Homo sapiens

<400> 5682

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Met Glu Ala Glu Thr Lys Thr Leu Pro Leu Glu Asn Ala Ser Ile Leu
 1           5           10           15
Ser Glu Gly Ser Leu Gln Glu Gly His Arg Leu Trp Ile Gly Asn Leu
          20           25           30
Asp Pro Lys Ile Thr Glu Tyr His Leu Leu Lys Leu Leu Gln Lys Phe
          35           40           45
Gly Lys Val Lys Gln Phe Asp Phe Leu Phe His Lys Ser Gly Ala Leu
          50           55           60
Glu Gly Gln Pro Arg Gly Tyr Cys Phe Val Asn Phe Glu Thr Lys Gln
65           70           75           80
Glu Ala Glu Gln Ala Ile Gln Cys Leu Asn Gly Lys Leu Ala Leu Ser
          85           90           95
Lys Lys Leu Val Val Arg Trp Ala His Ala Gln Val Lys Arg Tyr Asp
          100          105          110
His Asn Lys Asn Asp Lys Ile Leu Pro Ile Ser Leu Glu Pro Ser Ser
          115          120          125
Ser Thr Glu Pro Thr Gln Ser Asn Leu Ser Val Thr Ala Lys Ile Lys
          130          135          140
Ala Ile Glu Ala Lys Leu Lys Met Met Ala Glu Asn Pro Asp Ala Glu
145          150          155          160
Tyr Pro Ala Ala Pro Val Tyr Ser Tyr Phe Lys Pro Pro Asp Lys Lys
          165          170          175
Arg Thr Thr Pro Tyr Ser Arg Thr Ala Trp Lys Ser Arg Arg
          180          185          190

```

<210> 5683

<211> 328

<212> DNA

<213> Homo sapiens

<400> 5683

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120
atgcttttcag aaggcaccac atgtgatgca cagcctctat ttacatgtga ataattacac
180
tgctgctttc tgggtaaaag tagggaaata cagtgttcca gggcatagga atgggtgctct
240
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300
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328

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<210> 5684

<211> 103

<212> PRT

<213> Homo sapiens

<400> 5684

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Met Lys Phe Val Tyr Phe Lys Ala Leu Leu Thr Lys Pro Ala Ser His

```

```

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Gln Gln Asn Lys Leu Phe Tyr Pro Glu His His Ser Tyr Ala Leu Glu
      20             25             30
His Cys Ile Ser Leu Leu Leu Thr Arg Lys Gln Gln Cys Asn Tyr Ser
      35             40             45
His Val Asn Arg Gly Cys Ala Ser His Val Val Pro Ser Glu Ser Ile
      50             55             60
Gly Trp Ile Val Cys Val Pro Trp Leu Met Leu Thr His Gln Tyr Arg
65             70             75             80
Ser Ala Leu Arg Val Cys Arg Asp Gly Gln Cys Leu Thr Ala Glu Ala
      85             90             95
Ser Leu Gly Gln Arg Met Asp
      100

```

&lt;210&gt; 5685

&lt;211&gt; 604

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5685

```

ccatgcagcc gcgtgggtgg caagcgggtg gtgtgctatg acgacagatt cattgtgaag
60
ctggcctacg agtctgacgg gatcgtggtt tccaacgaca cataccgtga cctccaaggc
120
gagcggcagg agtggaagcg cttcatcgag gagcggctgc tcatgtactc cttcgtcaat
180
gacaagtatg ttccctccca gaggcctga cagacttggg gtccacaggg gaagccagag
240
gtgcccttgg caaggggtgga gctgggggct gggctctgcg gggccctgtg gccatgggag
300
gttgcgggtc ttggctccag gcagctttga gagtgagacg gatagctcac cacataggag
360
aaatcagacc gggaccaggc aggctgtggg gtggagagag tggctaattt gggagataga
420
gccgtagcac ttatgagggg atgtatgtgg ttgatgggtc caggtggcct ctctacgaac
480
caacatggca tctctcgagc agaggccatg ggccagtggg tgcgggctgc catccccga
540
cgacttcagg gagggagtgc ccctaaaggt gcccattggc tgtggccctc tagaccgggg
600
atcc
604

```

&lt;210&gt; 5686

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5686

```

Pro Cys Ser Arg Val Gly Gly Lys Arg Val Val Cys Tyr Asp Asp Arg
1             5             10             15
Phe Ile Val Lys Leu Ala Tyr Glu Ser Asp Gly Ile Val Val Ser Asn
      20             25             30
Asp Thr Tyr Arg Asp Leu Gln Gly Glu Arg Gln Glu Trp Lys Arg Phe

```

35 40 45  
 Ile Glu Glu Arg Leu Leu Met Tyr Ser Phe Val Asn Asp Lys Tyr Val  
 50 55 60  
 Pro Ser Gln Arg Pro  
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<210> 5687  
 <211> 328  
 <212> DNA  
 <213> Homo sapiens

<400> 5687  
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 120  
 ggtggatccg aaactctggc tgacgggaag agctgtgaga atgtggatga atgtgtgggc  
 180  
 ctgcagccgg tgtgccccca ggggaccaca tgcataca cgggtggaag cttccagtgt  
 240  
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 300  
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 328

<210> 5688  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 5688  
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 Gly Gly Glu Arg Pro Arg Leu Cys Met His Ala Cys Val Asn Thr Pro  
 20 25 30  
 Gly Ser Ser Arg Cys Thr Cys Pro Gly Gly Ser Glu Thr Leu Ala Asp  
 35 40 45  
 Gly Lys Ser Cys Glu Asn Val Asp Glu Cys Val Gly Leu Gln Pro Val  
 50 55 60  
 Cys Pro Gln Gly Thr Thr Cys Ile Asn Thr Gly Gly Ser Phe Gln Cys  
 65 70 75 80  
 Val Ser Pro Glu Cys Pro Glu Gly Ser Gly Asn Val Ser Tyr Val Lys  
 85 90 95  
 Thr Ser Pro Phe Gln Cys Glu Arg Asn Pro Cys Pro Met  
 100 105

<210> 5689  
 <211> 1897  
 <212> DNA  
 <213> Homo sapiens

<400> 5689  
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tgaacaatca gaatcataga agagtgtgag cactggtcct ttgtcttcca ggtgggacag  
120  
tgtgtgggtgg tcttcagcca ggctcctagt gggagagccc cactcagccc cagtttgaac  
180  
tctcgcccat cacctatcag tgccactncc tccagctctc gttcctgaaa cccgagagta  
240  
ccgctctcag tctccagtaa gaagcatgga tgaagctcct tgtgttaacg gccgctgggg  
300  
aacactgaga cccagggctc aaaggcagac tcctcagggt cccgggaagg gagcctttcc  
360  
ccagccagag gagacggctc tcctatcctc aatgggtggga gtttgtctcc aggaacggca  
420  
gctgtgggtg gctcttcttt ggacagtcct gtacaggcca tatctccaag tactccatct  
480  
gctgctgaag gatacgacct gaaaatagga ctttctttgg cccccgacg aggatcaacc  
540  
agatcagaaa gatctgagat taggatccat agatctgaat tgggatctaa acccgcttcc  
600  
agtagtaatc ccatggatgg catggacaat aggacagttg ggggaagtat gagacaccct  
660  
cctgaacaga caaatgggtg gcatacccca cctcacgtgg ccagtgcctt tgcagggggc  
720  
gtctccccag gtgccctgcg tcggagtctg gaagccatca aagcgatgct ctccaaaggc  
780  
ccctcggcct ctgcagcact aagtcctcct cttgggtctt ctccaggctc tcctgggagc  
840  
cagagtttga gcagtggaga aacagtgcc atccctcgcc cagggcctgc ccaaggagat  
900  
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960  
gttggaacac ccctatacca gagtatgaac tgcaagccca tgcagatgta cgtgctggac  
1020  
attaaagaca ccaaggagaa ggggcgggtc aaatggaaag tatttaatag cagttctgtg  
1080  
gttggacctc ctgaaaccag cctgcatacc gtggtacaag gcaggggtga actcatcata  
1140  
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1200  
tactttgtac gagcaaagag ataatgtgtt ctaaaccctt ttcttttctt gtggctttta  
1260  
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1320  
cagaagccaa aactctttta ttcccaaccg aagtcactcc aggctgggat caaatctcca  
1380  
ttaagaaaaa aaattatata taaatatata tatatatatt atatagccaa ctctgttgac  
1440  
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gctgggctgc ctttttctac cttgctggta actagaccaa gaagttagag aatagactaa  
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1620  
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1680

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 1800  
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 1897

<210> 5690

<211> 54

<212> PRT

<213> Homo sapiens

<400> 5690

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Val	Gly	Gln	Cys	Val	Val	Val	Phe	Ser	Gln	Ala	Pro	Ser	Gly	Arg	Ala
			20					25					30		
Pro	Leu	Ser	Pro	Ser	Leu	Asn	Ser	Arg	Pro	Ser	Pro	Ile	Ser	Ala	Thr
		35					40					45			
Xaa	Ser	Ser	Ser	Arg	Ser										
															50

<210> 5691

<211> 1227

<212> DNA

<213> Homo sapiens

<400> 5691

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 120  
 catcaaaacg aggacgaacc cattcgtgtt agctaccatc ggaatatcca ctataattca  
 180  
 gtggtgaatc ctaacaaggc caccattggt gtggggctgg gctgccatca ttcaaaccag  
 240  
 ggtttgcaga gcagtctctg atgaagaatg ccataaaaac atcggaggag tcatggattg  
 300  
 aacagcagat gctagaagac aagaaacggg ccacagactg ggaggccaca aatgaagcca  
 360  
 tcgaggagca ggtggctcgg gaatcctacc tgcagtgggt gcgggatcag gagaaacagg  
 420  
 ctcgccaggt ccgaggcccc agccagcccc ggaaagccag cgccacatgc agttcggcca  
 480  
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 720

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 780  
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 840  
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 900  
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 1020  
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 1080  
 ctgatgccag ggaggtggga ggaagaagtg ggaaatttcc cttcccagta cccccaagaa  
 1140  
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<210> 5692

<211> 86

<212> PRT

<213> Homo sapiens

<400> 5692

Lys	Arg	Lys	Asn	Asn	Cys	His	Gly	Asn	His	Ile	Glu	Met	Gln	Ala	Met
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Ala	Glu	Met	Tyr	Asn	Arg	Pro	Val	Glu	Val	Tyr	Gln	Tyr	Ser	Thr	Glu
			20					25					30		
Pro	Ile	Asn	Thr	Phe	His	Gly	Ile	His	Gln	Asn	Glu	Asp	Glu	Pro	Ile
			35				40					45			
Arg	Val	Ser	Tyr	His	Arg	Asn	Ile	His	Tyr	Asn	Ser	Val	Val	Asn	Pro
			50				55				60				
Asn	Lys	Ala	Thr	Ile	Gly	Val	Gly	Leu	Gly	Cys	His	His	Ser	Asn	Gln
65					70				75						80
Gly	Leu	Gln	Ser	Ser	Leu										
					85										

<210> 5693

<211> 389

<212> DNA

<213> Homo sapiens

<400> 5693

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 120  
 tccaaccccc cagggcccct cgtcggggcg tcccaactta gtcgtcccct gacgcggcct  
 180  
 ctggggccctc ccgggttggg gagctgacgg cagcttcccc ccacaggtgc ctctgagcct  
 240  
 cggaacatga tctacatgag ccgcttgggt atctggggcg agggcacacc cttccggaac  
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 389

<210> 5694  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 5694  
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 Met Ser Arg Leu Gly Ile Trp Gly Glu Gly Thr Pro Phe Arg Asn Phe  
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 Glu Glu Phe Leu His Ala Ile Glu Lys Arg Gly Val Gly Ala Met Glu  
 35 40 45  
 Ile Val Ala Met Asp Met Lys Val Ser Gly His Val  
 50 55 60

<210> 5695  
 <211> 1417  
 <212> DNA  
 <213> Homo sapiens

<400> 5695  
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 cccccagata gggggactga tggcaaggcc cagctgggtgg tgcactcggc ctttgagcag  
 180  
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 360  
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 480  
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 780  
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 840



gatggccata aggcgggtgtt cgtggcacgg gtgctgactg gcgactacgg gcagggccgc  
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&lt;210&gt; 5696

&lt;211&gt; 368

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5696

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&lt;210&gt; 5697

&lt;211&gt; 3362

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5697

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Cys Ala Tyr Glu Pro	Met Asp Phe Val Met Ala	Leu Ile Tyr Asp Met
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260	265	270
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&lt;210&gt; 5699

&lt;211&gt; 1565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5699

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&lt;210&gt; 5700

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5700

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<212> PRT

<213> Homo sapiens

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&lt;210&gt; 5703

&lt;211&gt; 1496

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5703

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<213> Homo sapiens

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&lt;211&gt; 768

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5705

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145					150					155				160	
Pro	Leu	Leu	Pro	Arg	Asp	Tyr	Leu	Val	Gln	Thr	Val	Glu	Glu	Glu	Ala
				165					170					175	
Leu	Ile	Lys	Asn	Asn	Thr	Cys	Lys	Asp	Phe	Leu	Ile	Glu	Ala	Met	
			180				185					190			
Lys	Tyr	His	Leu	Leu	Pro	Leu	Asp	Gln	Arg	Leu	Leu	Ile	Lys	Asn	Pro
		195					200					205			
Arg	Thr	Lys	Pro	Arg	Thr	Pro	Val	Ser	Leu	Pro	Lys	Val	Met	Ile	Val
	210					215					220				
Val	Gly	Gly	Gln	Ala	Pro	Lys	Ala	Ile	Arg	Ser	Val	Glu	Cys	Tyr	Asp
225					230					235				240	
Phe	Glu	Glu	Asp	Arg	Trp	Asp	Gln	Ile	Ala	Glu	Leu	Pro	Ser	Arg	Arg
				245					250					255	
Cys	Arg	Ala	Gly	Val	Val	Phe	Met	Ala	Gly	His	Val	Tyr	Ala	Val	Gly
			260				265					270			
Gly	Phe	Asn	Gly	Ser	Leu	Arg	Val	Arg	Thr	Val	Asp	Val	Tyr	Asp	Gly
		275					280					285			
Val	Lys	Asp	Gln	Trp	Thr	Ser	Ile	Ala	Ser	Met	Gln	Glu	Arg	Arg	Ser
	290					295					300				
Thr	Leu	Gly	Ala	Ala	Val	Leu	Asn	Asp	Leu	Leu	Tyr	Ala	Val	Gly	Gly

305	310								315				320			
Phe	Asp	Gly	Ser	Thr	Gly	Leu	Ala	Ser	Val	Glu	Ala	Tyr	Ser	Tyr	Lys	
				325					330					335		
Thr	Asn	Glu	Trp	Phe	Phe	Val	Ala	Pro	Met	Asn	Thr	Arg	Arg	Ser	Ser	
			340					345					350			
Val	Gly	Val	Gly	Val	Val	Glu	Gly	Lys	Leu	Tyr	Ala	Val	Gly	Gly	Tyr	
		355					360					365				
Asp	Gly	Ala	Ser	Arg	Gln	Cys	Leu	Ser	Thr	Val	Glu	Gln	Tyr	Asn	Pro	
	370					375					380					
Ala	Thr	Asn	Glu	Trp	Ile	Tyr	Val	Ala	Asp	Met	Ser	Thr	Arg	Arg	Ser	
385					390				395						400	
Gly	Ala	Gly	Val	Gly	Val	Leu	Ser	Gly	Gln	Leu	Tyr	Ala	Thr	Gly	Gly	
				405					410					415		
His	Asp	Gly	Pro	Leu	Val	Arg	Lys	Ser	Val	Glu	Val	Tyr	Asp	Pro	Gly	
			420					425					430			
Thr	Asn	Thr	Trp	Lys	Gln	Val	Ala	Asp	Met	Asn	Met	Cys	Arg	Arg	Asn	
		435					440					445				
Ala	Gly	Val	Cys	Ala	Val	Asn	Gly	Leu	Leu	Tyr	Val	Val	Gly	Gly	Asp	
	450					455					460					
Asp	Gly	Ser	Cys	Asn	Leu	Ala	Ser	Val	Glu	Tyr	Tyr	Asn	Pro	Val	Thr	
465					470				475						480	
Asp	Lys	Trp	Thr	Leu	Leu	Pro	Thr	Asn	Met	Ser	Thr	Gly	Arg	Ser	Tyr	
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<211> 1805
<212> DNA
<213> Homo sapiens
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360
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420
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480
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540
agccacgcct cccgccaccc aaggatctct gtcctcaacg acggcacctt gaacttttcc
600
cacgtgctgc tttcagacac tgggggtgtac acatgcatgg tgaccaatgt tgcaggcaac
660
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 780  
 tacaagcctg ttcctaccac gtccactggg taccagccgg catataccac ctctaccacg  
 840  
 gtgctcattc agactacccg tgtgcccagg cagggtggcag taccgcgcac agacaccact  
 900  
 gacaagatgc agaccagcct ggatgaagtc atgaagacca ccaagatcat cattggctgc  
 960  
 tttgtggcag tgactctgct agctgccgcc atgttgattg tcttctataa acttcgtaag  
 1020  
 cggcaccagc agcggagtag agtcacagcc gcccgactg ttgagataat ccagggtggac  
 1080  
 gaagacatcc cagcagcaac atccgcagca gcaacagcag ctccgtccgg tgtatcaggt  
 1140  
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 1200  
 gcacatgggg cccactggac agaaaacagc ctgggggaact ctctgcaccc cacagtcacc  
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 1320  
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 1380  
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 1440  
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 1680  
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 ttatt  
 1805

&lt;210&gt; 5710

&lt;211&gt; 441

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5710

Asn	Leu	Thr	Pro	Leu	Val	Asp	Met	Glu	Glu	Leu	Glu	Met	Ser	Gly	Asn
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His	Phe	Pro	Glu	Ile	Arg	Pro	Gly	Ser	Phe	His	Gly	Leu	Ser	Ser	Leu
			20				25					30			
Lys	Lys	Leu	Trp	Val	Met	Asn	Ser	Gln	Val	Ser	Leu	Ile	Glu	Arg	Asn
		35				40					45				
Ala	Phe	Asp	Gly	Leu	Ala	Ser	Leu	Val	Glu	Leu	Asn	Leu	Ala	His	Asn

50	55	60
Asn Leu Ser Ser Leu Pro His Asp Leu Phe Thr Pro Leu Arg Tyr Leu		
65	70	75
Val Glu Leu His Leu His His Asn Pro Trp Asn Cys Asp Cys Asp Ile		80
	85	90
Leu Trp Leu Ala Trp Trp Leu Arg Glu Tyr Ile Pro Thr Asn Ser Thr		95
	100	105
Cys Cys Gly Arg Cys His Ala Pro Met His Met Arg Gly Arg Tyr Leu		110
	115	120
Val Glu Val Asp Gln Ala Ser Phe Gln Cys Ser Ala Pro Phe Ile Met		125
	130	135
Asp Ala Pro Arg Asp Leu Asn Ile Ser Glu Gly Arg Met Ala Glu Leu		140
145	150	155
Lys Cys Arg Thr Pro Pro Met Ser Ser Val Lys Trp Leu Leu Pro Asn		160
	165	170
Gly Thr Val Leu Ser His Ala Ser Arg His Pro Arg Ile Ser Val Leu		175
	180	185
Asn Asp Gly Thr Leu Asn Phe Ser His Val Leu Leu Ser Asp Thr Gly		190
	195	200
Val Tyr Thr Cys Met Val Thr Asn Val Ala Gly Asn Ser Asn Ala Ser		205
	210	215
Ala Tyr Leu Asn Val Ser Thr Ala Glu Leu Asn Thr Ser Asn Tyr Ser		220
225	230	235
Phe Phe Thr Thr Val Thr Val Glu Thr Thr Glu Ile Ser Pro Glu Asp		240
	245	250
Thr Thr Arg Lys Tyr Lys Pro Val Pro Thr Thr Ser Thr Gly Tyr Gln		255
	260	265
Pro Ala Tyr Thr Thr Ser Thr Thr Val Leu Ile Gln Thr Thr Arg Val		270
	275	280
Pro Lys Gln Val Ala Val Pro Ala Thr Asp Thr Thr Asp Lys Met Gln		285
	290	295
Thr Ser Leu Asp Glu Val Met Lys Thr Thr Lys Ile Ile Ile Gly Cys		300
305	310	315
Phe Val Ala Val Thr Leu Leu Ala Ala Ala Met Leu Ile Val Phe Tyr		320
	325	330
Lys Leu Arg Lys Arg His Gln Gln Arg Ser Thr Val Thr Ala Ala Arg		335
	340	345
Thr Val Glu Ile Ile Gln Val Asp Glu Asp Ile Pro Ala Ala Thr Ser		350
	355	360
Ala Ala Ala Thr Ala Ala Pro Ser Gly Val Ser Gly Glu Gly Ala Val		365
	370	375
Val Leu Pro Thr Ile His Asp His Ile Asn Tyr Asn Thr Tyr Lys Pro		380
385	390	395
Ala His Gly Ala His Trp Thr Glu Asn Ser Leu Gly Asn Ser Leu His		400
	405	410
Pro Thr Val Thr Thr Ile Ser Glu Pro Tyr Ile Ile Gln Thr His Thr		415
	420	425
Lys Asp Lys Val Gln Glu Thr Gln Ile		430
	435	440

&lt;210&gt; 5711

&lt;211&gt; 1142

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5711

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 120  
 agtcactcga gagaatctct gagtcctggc gagggccttc tgaggcttcg tgtattagca  
 180  
 gctgttgctt tccaactcag cggcagggtt gcctttcccc acggacactc tggaccttgt  
 240  
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 300  
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 420  
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 480  
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 780  
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 1140  
 1142

&lt;210&gt; 5712

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5712

Met	Trp	Gln	Lys	Tyr	Ala	Gly	Ser	Arg	Arg	Ser	Met	Pro	Leu	Gly	Ala
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Arg	Ile	Leu	Phe	His	Gly	Val	Phe	Tyr	Ala	Gly	Gly	Phe	Ala	Ile	Val
		20						25				30			
Tyr	Tyr	Leu	Ile	Gln	Lys	Phe	His	Ser	Arg	Ala	Leu	Tyr	Tyr	Lys	Leu
		35					40					45			

Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly  
 50 55 60  
 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe  
 65 70 75 80  
 Val Asp Ile Val Asp Ala Lys Leu Lys Ile Pro Val Ser Gly Ser Lys  
 85 90 95  
 Ser Glu Gly Leu Leu Tyr Val His Ser Ser Arg Gly Gly Pro Phe Gln  
 100 105 110  
 Arg Trp His Leu Asp Glu Val Phe Leu Glu Leu Lys Asp Gly Gln Gln  
 115 120 125  
 Ile Pro Val Phe Lys Leu Ser Gly Glu Asn Gly Asp Glu Val Lys Lys  
 130 135 140  
 Glu  
 145

&lt;210&gt; 5713

&lt;211&gt; 1996

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5713

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 120  
 tacctagaag actatctgga aatgattgag cagcttccta tggatctgcg ggaccgcttc  
 180  
 acggaaatgc gcgagatgga cctgcagggtg cagaatgcaa tggatcaact agaacaaga  
 240  
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 300  
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 360  
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 420  
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 480  
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 540  
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 960

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 1200  
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 1860  
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 1920  
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 1980  
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 1996

&lt;210&gt; 5714

&lt;211&gt; 408

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5714

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Glu	Met	Asp	Leu	Gln	Val	Gln	Asn	Ala	Met	Asp	Gln	Leu	Glu	Gln	Arg
			20					25					30		
Val	Ser	Glu	Phe	Phe	Met	Asn	Ala	Lys	Lys	Asn	Lys	Pro	Glu	Trp	Arg
			35				40					45			
Glu	Glu	Gln	Met	Ala	Ser	Ile	Lys	Lys	Asp	Tyr	Tyr	Lys	Ala	Leu	Glu
	50					55				60					
Asp	Ala	Asp	Glu	Lys	Val	Gln	Leu	Ala	Asn	Gln	Ile	Tyr	Asp	Leu	Val
65					70					75				80	
Asp	Arg	His	Leu	Arg	Lys	Leu	Asp	Gln	Glu	Leu	Ala	Lys	Phe	Lys	Met

										85			90			95			
Glu	Leu	Glu	Ala	Asp	Asn	Ala	Gly	Ile	Thr	Glu	Ile	Leu	Glu	Arg	Arg				
100								105				110							
Ser	Leu	Glu	Leu	Asp	Thr	Pro	Ser	Gln	Pro	Val	Asn	Asn	His	His	Ala				
115								120				125							
His	Ser	His	Thr	Pro	Val	Glu	Lys	Arg	Lys	Tyr	Asn	Pro	Thr	Ser	His				
130								135				140							
His	Thr	Thr	Thr	Asp	His	Ile	Pro	Glu	Lys	Lys	Phe	Lys	Ser	Glu	Ala				
145								150				155				160			
Leu	Leu	Ser	Thr	Leu	Thr	Ser	Asp	Ala	Ser	Lys	Glu	Asn	Thr	Leu	Gly				
165								170				175							
Cys	Arg	Asn	Asn	Asn	Ser	Thr	Ala	Ser	Ser	Asn	Asn	Ala	Tyr	Asn	Val				
180								185				190							
Asn	Ser	Ser	Gln	Pro	Leu	Gly	Ser	Tyr	Asn	Ile	Gly	Ser	Leu	Ser	Ser				
195								200				205							
Gly	Thr	Gly	Ala	Gly	Ala	Ile	Thr	Met	Ala	Ala	Ala	Gln	Ala	Val	Gln				
210								215				220							
Ala	Thr	Ala	Gln	Met	Lys	Glu	Gly	Arg	Arg	Thr	Ser	Ser	Leu	Lys	Ala				
225								230				235				240			
Ser	Tyr	Glu	Ala	Phe	Lys	Asn	Asn	Asp	Phe	Gln	Leu	Gly	Lys	Glu	Phe				
245								250				255							
Ser	Met	Ala	Arg	Glu	Thr	Val	Gly	Tyr	Ser	Ser	Ser	Ser	Ala	Leu	Met				
260								265				270							
Thr	Thr	Leu	Thr	Gln	Asn	Ala	Ser	Ser	Ser	Ala	Ala	Asp	Ser	Arg	Ser				
275								280				285							
Gly	Arg	Lys	Ser	Lys	Asn	Asn	Asn	Lys	Ser	Ser	Ser	Gln	Gln	Ser	Ser				
290								295				300							
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Leu	Ser	Ser	Cys	Ser	Ser	Ser	Ser	Thr				
305								310				315				320			
Val	Val	Gln	Glu	Ile	Ser	Gln	Gln	Thr	Thr	Val	Val	Pro	Glu	Ser	Asp				
325								330				335							
Ser	Asn	Ser	Gln	Val	Asp	Trp	Thr	Tyr	Asp	Pro	Asn	Glu	Pro	Arg	Tyr				
340								345				350							
Cys	Ile	Cys	Asn	Gln	Val	Ser	Tyr	Gly	Glu	Met	Val	Gly	Cys	Asp	Asn				
355								360				365							
Gln	Asp	Cys	Pro	Ile	Glu	Trp	Phe	His	Tyr	Gly	Cys	Val	Gly	Leu	Thr				
370								375				380							
Glu	Ala	Pro	Lys	Gly	Lys	Trp	Tyr	Cys	Pro	Gln	Cys	Thr	Ala	Ala	Met				
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Lys	Arg	Arg	Gly	Ser	Arg	His	Lys												
405																			

<210> 5715

<211> 1458

<212> DNA

<213> Homo sapiens

<400> 5715

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120

ggggccttggc cgtctagtgt gatgaaggag gcgaccccca aggtgggaag gcgcacgggt  
180



tggggtttga ggggtggatga ttgggtgacgg aggggtgtatc ttcaggagga ggttcgagtg  
 240  
 aagatcaaag acttgaatga acacattgtt tgctgcctat gcgccggcta cttcgtggat  
 300  
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 360  
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 420  
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 480  
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 540  
 cagcccactg gggaagagcc agcactgagc aacctcggcc tccccttcag cagctttgac  
 600  
 cactctaaag cccactacta tcgctatgat gagcagttga acctgtgcct ggagcggctg  
 660  
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 720  
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 780  
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 840  
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 900  
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 960  
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&lt;210&gt; 5716

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5716

Leu Gln Glu Glu Val Arg Val Lys Ile Lys Asp Leu Asn Glu His Ile

1

5

10

15

Val Cys Cys Leu Cys Ala Gly Tyr Phe Val Asp Ala Thr Thr Ile Thr

	20		25		30
Glu Cys Leu His Thr Phe Cys Lys Ser Cys Ile Val Lys Tyr Leu Gln					
35		40		45	
Thr Ser Lys Tyr Cys Pro Met Cys Asn Ile Lys Ile His Glu Thr Gln					
50		55		60	
Pro Leu Leu Asn Leu Lys Leu Asp Arg Val Met Gln Asp Ile Val Tyr					
65		70		75	80
Lys Leu Val Pro Gly Leu Gln Asp Ser Glu Glu Lys Arg Ile Arg Glu					
	85		90		95
Phe Tyr Gln Ser Arg Gly Leu Asp Arg Val Thr Gln Pro Thr Gly Glu					
	100		105		110
Glu Pro Ala Leu Ser Asn Leu Gly Leu Pro Phe Ser Ser Phe Asp His					
	115		120		125
Ser Lys Ala His Tyr Tyr Arg Tyr Asp Glu Gln Leu Asn Leu Cys Leu					
	130		135		140
Glu Arg Leu Arg					
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&lt;210&gt; 5717

&lt;211&gt; 1419

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5717

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 1419

&lt;210&gt; 5718

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5718

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			20					25					30		
Thr	Val	His	Gly	Asn	Val	Ile	Thr	Thr	Asn	Thr	Ile	Phe	Glu	Asn	Leu
		35					40					45			
Trp	Phe	Ser	Cys	Ala	Thr	Asp	Ser	Leu	Gly	Val	Tyr	Asn	Cys	Trp	Glu
	50					55				60					
Phe	Pro	Ser	Met	Leu	Ala	Leu	Ser	Gly	Tyr	Ile	Gln	Ala	Cys	Arg	Ala
65					70					75				80	
Leu	Met	Ile	Thr	Ala	Ile	Leu	Leu	Gly	Phe	Leu	Gly	Leu	Leu	Leu	Gly
				85					90					95	
Ile	Ala	Gly	Leu	Arg	Cys	Thr	Asn	Ile	Gly	Gly	Leu	Glu	Leu	Ser	Arg
			100					105					110		
Lys	Ala	Lys	Leu	Ala	Ala	Thr	Ala	Gly	Ala	Leu	His	Ile	Leu	Ala	Gly
		115					120					125			
Ile	Cys	Gly	Met	Val	Ala	Ile	Ser	Trp	Tyr	Ala	Phe	Asn	Ile	Thr	Arg
	130					135				140					
Asp	Phe	Phe	Asp	Pro	Leu	Tyr	Pro	Gly	Thr	Lys	Tyr	Glu	Leu	Gly	Pro
145					150					155				160	
Ala	Leu	Tyr	Leu	Gly	Trp	Ser	Ala	Ser	Leu	Ile	Ser	Ile	Leu	Gly	Gly
				165					170					175	
Leu	Cys	Leu	Cys	Ser	Ala	Cys	Cys	Cys	Gly	Ser	Asp	Glu	Asp	Pro	Ala
		180						185					190		
Ala	Ser	Ala	Arg	Arg	Pro	Tyr	Gln	Ala	Pro	Val	Ser	Val	Met	Pro	Val
		195					200					205			
Ala	Thr	Ser	Asp	Gln	Glu	Gly	Asp	Ser	Ser	Phe	Gly	Lys	Tyr	Gly	Arg
	210					215					220				
Asn	Ala	Tyr	Val												

225

&lt;210&gt; 5719

&lt;211&gt; 2267

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5719

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 2267

&lt;210&gt; 5720

&lt;211&gt; 455

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5720

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Gln	Gln	Gln	Arg	Gly	His	Gly	Ala	Val	His	Ala	Ala	Gly	Gln	Gly	Ala
			20					25					30		
His	Asp	Val	Pro	Gln	Gly	Leu	His	Pro	Pro	Val	Ala	Pro	Ser	Gly	Gly
	35						40					45			
Val	Asp	Ser	Ala	Val	Ala	Ala	Leu	Leu	Leu	Arg	Arg	Arg	Gly	Tyr	Gln
	50					55					60				
Val	Thr	Gly	Val	Phe	Met	Lys	Asn	Trp	Asp	Ser	Leu	Asp	Glu	His	Gly
65					70					75				80	
Val	Cys	Thr	Ala	Asp	Lys	Asp	Cys	Glu	Asp	Ala	Tyr	Arg	Val	Cys	Gln
			85						90					95	
Ile	Leu	Asp	Ile	Pro	Phe	His	Gln	Val	Ser	Tyr	Val	Lys	Glu	Tyr	Trp
	100							105					110		
Asn	Asp	Val	Phe	Ser	Asp	Phe	Leu	Asn	Glu	Tyr	Glu	Lys	Gly	Arg	Thr
	115						120					125			
Pro	Asn	Pro	Asp	Ile	Val	Cys	Asn	Lys	His	Ile	Lys	Phe	Ser	Cys	Phe

130	135	140
Phe His Tyr Ala Val Asp Asn Leu Gly Ala Asp Ala Ile Ala Thr Gly		
145	150	155
His Tyr Ala Arg Thr Ser Leu Glu Asp Glu Glu Val Phe Glu Gln Lys		160
	165	170
His Val Lys Lys Pro Glu Gly Leu Phe Arg Asn Arg Phe Glu Val Arg		175
	180	185
Asn Ala Val Lys Leu Leu Gln Ala Ala Asp Ser Phe Lys Asp Gln Thr		190
	195	200
Phe Phe Leu Ser Gln Val Ser Gln Asp Ala Leu Arg Arg Thr Ile Phe		205
	210	215
Pro Leu Gly Gly Leu Thr Lys Glu Phe Val Lys Lys Ile Ala Ala Glu		220
225	230	235
Asn Arg Leu His His Val Leu Gln Lys Lys Glu Ser Met Gly Met Cys		240
	245	250
Phe Ile Gly Lys Arg Asn Phe Glu His Phe Leu Leu Gln Tyr Leu Gln		255
	260	265
Pro Arg Pro Gly His Phe Ile Ser Ile Glu Asp Asn Lys Val Leu Gly		270
	275	280
Thr His Lys Gly Trp Phe Leu Tyr Thr Leu Gly Gln Arg Ala Asn Ile		285
	290	295
Gly Gly Leu Arg Glu Pro Trp Tyr Val Val Glu Lys Asp Ser Val Lys		300
305	310	315
Gly Asp Val Phe Val Ala Pro Arg Thr Asp His Pro Ala Leu Tyr Arg		320
	325	330
Asp Leu Leu Arg Thr Ser Arg Val His Trp Ile Ala Glu Glu Pro Pro		335
	340	345
Ala Ala Leu Val Arg Asp Lys Met Met Glu Cys His Phe Arg Phe Arg		350
	355	360
His Gln Met Ala Leu Val Pro Cys Val Leu Thr Leu Asn Gln Asp Gly		365
	370	375
Thr Val Trp Val Thr Ala Val Gln Ala Val Arg Ala Leu Ala Thr Gly		380
385	390	395
Gln Phe Ala Val Phe Tyr Lys Gly Asp Glu Cys Leu Gly Ser Gly Lys		400
	405	410
Ile Leu Arg Leu Gly Pro Ser Ala Tyr Thr Leu Gln Lys Gly Gln Arg		415
	420	425
Arg Ala Gly Met Ala Thr Glu Ser Pro Ser Asp Ser Pro Glu Asp Gly		430
	435	440
Pro Gly Leu Ser Pro Leu Leu		445
450	455	

&lt;210&gt; 5721

&lt;211&gt; 400

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5721

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120

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180

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<210> 5722  
 <211> 80  
 <212> PRT  
 <213> Homo sapiens

<400> 5722  
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 Glu Arg Lys Ala Leu Met Leu Ala Met Gly Tyr His Glu Lys Gly Arg  
 20 25 30  
 Ala Phe Leu Lys Arg Lys Glu Tyr Gly Ile Ala Leu Pro Cys Leu Leu  
 35 40 45  
 Asp Ala Asp Lys Tyr Phe Trp Trp Ala Leu Leu Tyr Leu Val Asn Thr  
 50 55 60  
 Ser Phe Lys Glu Asp Gly Pro Asp Tyr Thr Glu His Leu Pro Cys Pro  
 65 70 75 80

<210> 5723  
 <211> 376  
 <212> DNA  
 <213> Homo sapiens

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 <212> PRT  
 <213> Homo sapiens

<400> 5724  
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Met Gly Val Pro Glu Val Trp Gly Leu Leu Ser Lys Glu Trp Trp His			
35	40	45	
Ala Gly Leu Ser Gly Ala Met Trp His Gly Trp Trp Ala Ser Ile Cys			
50	55	60	
Ser Gly Cys Leu Leu Ser Asp Glu Gly Thr Gly Cys Pro Cys Leu Pro			
65	70	75	80
Gln His Ala Pro Cys Pro Ala Cys Pro Leu Pro Cys Met Ser Pro Val			
85	90	95	
Leu His Ile Pro Cys Pro Ala Gly Pro Ile Leu Ser Cys Met Ser Pro			
100	105	110	
Val Leu His Met Pro Cys Pro Ala Leu Leu Leu His Ala			
115	120	125	

&lt;210&gt; 5725

&lt;211&gt; 1160

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5725

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960

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<210> 5726

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5726

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Leu	Tyr	Ala	Arg	Pro	Ala	Leu	Pro	Leu	Leu	Leu	Arg	Ser	Gly	Gly	Gly
			20					25					30		
Ser	Arg	Pro	Pro	Gly	Ser	Arg	Pro	Thr	Ala	His	Gly	Arg	Ala	Trp	Gly
		35					40					45			
Ala	Ser	Arg	Ala	Arg	Arg	Pro	Ala	Pro	Gly	Gly	Pro	Phe	Pro	Gly	Val
	50				55					60					
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65					70					75				80	
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			85						90					95	
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			100					105						110	
Val	Pro	Phe	Gly	Leu	Tyr	Thr	Pro	Ala	Ser	Arg	Gly	Thr	Gly	Asp	Ser
		115					120					125			
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	130					135					140				
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145					150					155					160
Met	Leu	Tyr	Leu	Gly	Ser	Arg	Ala	Ser	Leu	Ala	Asp	Ala	Leu	Pro	Leu
			165						170					175	
His	Ile	Ala	Pro	Arg	Trp	Phe	Ser	Ser	His	Ser	Gly	Phe	Lys	Cys	Pro
			180					185					190		
Ile	Cys	Ser	Lys	Ser	Val	Ala	Ser	Asp	Glu	Met	Glu	Met	His	Phe	Ile
		195					200					205			
Met	Cys	Leu	Ser	Lys	Pro	Arg	Leu	Ser	Tyr	Asn	Asp	Asp	Val	Leu	Thr
	210					215					220				
Lys	Asp	Ala	Gly	Glu	Cys	Val	Ile	Cys	Leu	Glu	Glu	Leu	Leu	Gln	Gly
225					230					235				240	
Asp	Thr	Ile	Ala	Arg	Leu	Pro	Cys	Leu	Cys	Ile	Tyr	His	Lys	Ser	Cys
			245						250					255	
Ile	Asp	Ser	Trp	Phe	Glu	Val	Asn	Arg	Ser	Cys	Pro	Glu	His	Pro	Ala
			260					265						270	

Asp

<210> 5727

<211> 1237

<212> DNA

<213> Homo sapiens

<400> 5727

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<210> 5728

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5728

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Lys	Tyr	Arg	Asp	Ile	Asp	Glu	Asp	Glu	Ile	Leu	Arg	Thr	Leu	Ser	Pro
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Glu	Glu	Leu	Glu	Gln	Leu	Asp	Cys	Glu	Leu	Gln	Glu	Met	Asp	Pro	Glu
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Glu	Ala	Met	Lys	Ala	Asn	Thr	Tyr	Val	Arg	Ser	Phe	Ser	Leu	Val	Ala
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		275				280						285			
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305				310						315				320	
Val	Glu	Met	Glu	Met	Ala	Thr	Val	Leu	Glu	Gln	Cys	Pro	Ser	Ile	Val
			325					330					335		
Arg	Phe	Gly	Tyr	His	Phe	Thr	Gln	Gln	Gly	Pro	Arg	Ala	Arg	Ala	Ala
		340					345					350			
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&lt;210&gt; 5729

&lt;211&gt; 381

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5729

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<210> 5730

<211> 64

<212> PRT

<213> Homo sapiens

<400> 5730

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			20					25				30			
Ser	Ser	Ala	Gly	Thr	Ala	Ser	Ser	Ser	Pro	Ala	Ser	Gly	Thr	Cys	Gly
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<210> 5731

<211> 891

<212> DNA

<213> Homo sapiens

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<210> 5732

<211> 193

<212> PRT

<213> Homo sapiens

<400> 5732

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		20					25					30			
Leu	Thr	Lys	Ala	Ala	Thr	Ser	Gly	Ile	Leu	Ser	Ala	Leu	Gly	Asn	Phe
		35				40					45				
Leu	Ala	Gln	Met	Ile	Glu	Lys	Lys	Arg	Lys	Lys	Glu	Asn	Ser	Arg	Ser
	50					55				60					
Leu	Asp	Val	Gly	Gly	Pro	Leu	Arg	Tyr	Ala	Val	Tyr	Gly	Phe	Phe	Phe
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Thr	Gly	Pro	Leu	Ser	His	Phe	Phe	Tyr	Phe	Phe	Met	Glu	His	Trp	Ile
				85				90						95	
Pro	Pro	Glu	Val	Pro	Leu	Ala	Gly	Leu	Arg	Arg	Leu	Leu	Leu	Asp	Arg
			100					105					110		
Leu	Val	Phe	Ala	Pro	Ala	Phe	Leu	Met	Leu	Phe	Phe	Leu	Ile	Met	Asn
		115					120					125			
Phe	Leu	Glu	Gly	Lys	Asp	Ala	Ser	Ala	Phe	Ala	Ala	Lys	Met	Arg	Gly
	130					135						140			
Gly	Phe	Trp	Pro	Ala	Leu	Arg	Met	Asn	Trp	Arg	Val	Trp	Thr	Pro	Leu
145					150					155					160
Gln	Phe	Ile	Asn	Ile	Asn	Tyr	Val	Pro	Leu	Lys	Phe	Arg	Val	Leu	Phe
			165					170						175	
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<210> 5733

<211> 950

<212> DNA

<213> Homo sapiens

<400> 5733

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 300  
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 420  
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&lt;210&gt; 5734

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5734

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Ile	Ser	Phe	Thr	Gly	Ala	Leu	Lys	Ile	Pro	Gly	Val	Ile	Glu	Phe	Ser
			20					25				30			
Leu	Cys	Leu	Leu	Phe	Ala	Lys	Leu	Val	Ser	Tyr	Thr	Phe	Leu	Phe	Trp
		35					40				45				
Leu	Pro	Leu	Tyr	Ile	Thr	Asn	Val	Asp	His	Leu	Asp	Ala	Lys	Lys	Ala
		50				55				60					
Gly	Cys	Thr	Gly	Ser	Pro	Asp	Pro	Leu	Arg	His	Ser	Ser	His	Arg	Thr
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Ser	Lys														

&lt;210&gt; 5735

&lt;211&gt; 4241

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5735

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<210> 5736

<211> 327

<212> PRT

<213> Homo sapiens

<400> ,5736

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			20					25					30		
Thr	Val	Arg	Gly	Glu	Arg	Ser	Tyr	Ser	Trp	Gly	Met	Ala	Val	Asn	Val
		35					40					45			
Tyr	Ser	Thr	Ser	Ile	Thr	Gln	Glu	Thr	Met	Ser	Arg	His	Asp	Ile	Ile
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Leu	Cys	Ser	Gly	Ala	Ala	Tyr	Cys	Gln	Phe	Met	Asp	Met	Leu	Phe	Pro
				85					90				95		
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Glu	Tyr	Ile	His	Asn	Phe	Lys	Leu	Leu	Gln	Ala	Ser	Phe	Lys	Arg	Met					
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	130					135					140									
Gln	Asp	Asn	Leu	Asp	Phe	Ile	Gln	Trp	Phe	Lys	Lys	Phe	Tyr	Asp	Ala					
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Ser	Pro	Ala	Ala	Lys	Pro	Gly	Ser	Thr	Pro	Ser	Arg	Pro	Ser	Ser	Ala					
	210					215					220									
Lys	Arg	Ala	Ser	Ser	Ser	Gly	Ser	Ala	Ser	Lys	Ser	Asp	Lys	Asp	Leu					
225					230					235					240					
Glu	Thr	Gln	Val	Ile	Gln	Leu	Asn	Glu	Gln	Val	His	Ser	Leu	Lys	Leu					
			245						250					255						
Ala	Leu	Glu	Gly	Val	Glu	Lys	Glu	Arg	Asp	Phe	Tyr	Phe	Gly	Lys	Leu					
		260						265					270							
Arg	Glu	Ile	Glu	Leu	Leu	Cys	Gln	Glu	His	Gly	Gln	Glu	Asn	Asp	Asp					
		275					280						285							
Leu	Val	Gln	Arg	Leu	Met	Asp	Ile	Leu	Tyr	Ala	Ser	Glu	Glu	His	Glu					
	290					295					300									
Gly	His	Thr	Glu	Glu	Pro	Glu	Ala	Glu	Glu	Gln	Ala	His	Glu	Gln	Gln					
305					310					315					320					
Pro	Pro	Gln	Gln	Glu	Glu	Tyr														
				325																

<210> 5737

<211> 340

<212> DNA

<213> Homo sapiens

<400> 5737

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ncaccccccc tggatgtggc tcttcggata tgcctttccc acggagccca gagacaaatg
60
tgcgtggccc tgggacagct ggaccggcct ccagacctcg cccatgacgg gaggagtctg
120
tggctgaaca tcagggggcaa ggaggcggct gcccaatcca tgttccatgt ctccacgcca
180
ctgccagtga tgaccggtgg tttcctgatg tacctgagag ggcagctgga gcctcagtgg
240
aagatgttgc agtgccatcc tcacctggtg gcttgaaatc ggccaagggt ggagcattta
300
caccgcagaa atgacaccgc acgccagcgc cccgcggccg
340

```

<210> 5738

<211> 99

<212> PRT

<213> Homo sapiens

&lt;400&gt; 5738

```

Met Leu Pro Pro Trp Pro Ile Ser Ser His Gln Val Arg Met Ala Leu
 1           5           10           15
Gln His Leu Pro Leu Arg Leu Gln Leu Pro Ser Gln Val His Gln Glu
          20           25           30
Thr Thr Gly His His Trp Gln Trp Arg Gly Asp Met Glu His Gly Leu
        35           40           45
Gly Ser Arg Leu Leu Ala Pro Asp Val Gln Pro Gln Thr Pro Pro Val
        50           55           60
Met Gly Glu Val Trp Arg Pro Val Gln Leu Ser Gln Gly His Ala His
65           70           75           80
Leu Ser Leu Gly Ser Val Gly Lys Ala Tyr Pro Lys Ser His Ile Gln
          85           90           95
Gly Gly Xaa

```

&lt;210&gt; 5739

&lt;211&gt; 780

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5739

```

actttcataa ttgtaacatt gaaatcttta atctggaata tgtactggca taaagagtga
60
ggcacatata tggcttttact attttccaga gggccaactg cttttactga ataatccatt
120
ttactcgta attggaacaa cctctagcct gtactaaatt tccatattta tttggcccgt
180
ttcaaagtcc tctattctct gctcatctgt ccacatctaa gtgctttaac tattgtggct
240
ttataaaata ttccaatatc ccataggacc ttatccttag tacttccat tttaaagttt
300
tccttgcaga cagggtacttt aaataccatc tcacagcacc catcatgtcc tatcttcagg
360
aaataaaatc tctgggtatt tccaagggaa gtgaaggact gacaccatga ttagaaagca
420
gagccagcac catggcccgt ccctgagcat gtccagcaaa ccctgccagg ctctgcagct
480
cctgagcacc ctgccttcgg gtctgccagt gtgtgggggc cagaagagaa aaacaacca
540
gggggaatgc ctccctcccc cagcaggaaa gcagcttggt catcatctgt ctgaaagcag
600
gtgctgcagc agctggcaac aaagccactc tgaaaggagc tgtgtgcact gcctgtctgg
660
aaggccatgc cagagtccat cgttgccctc accctacctg tgcaggaaac ctggacatca
720
ccacttcaag gccctacctt cctttctggg cagagcccaa ccacaataaa caggacgcgt
780

```

&lt;210&gt; 5740

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5740

```

Met Ile Arg Lys Gln Ser Gln His His Gly Pro Ser Leu Ser Met Ser
 1           5           10           15
Ser Lys Pro Cys Gln Ala Leu Gln Leu Leu Ser Thr Leu Pro Ser Gly
          20           25           30
Leu Pro Val Cys Gly Gly Gln Lys Arg Lys Thr Thr Gln Gly Glu Cys
          35           40           45
Leu Leu Pro Pro Ala Gly Lys Gln Leu Gly His His Leu Ser Glu Ser
          50           55           60
Arg Cys Cys Ser Ser Trp Gln Gln Ser His Ser Glu Arg Ser Cys Val
65           70           75           80
His Cys Leu Ser Gly Arg Pro Cys Gln Ser Pro Ser Leu Pro Pro Pro
          85           90           95
Tyr Leu Cys Arg Lys Pro Gly His His His Phe Lys Ala Leu Pro Ser
          100          105          110
Phe Leu Gly Arg Ala Gln Pro Gln
          115          120

```

&lt;210&gt; 5741

&lt;211&gt; 2444

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5741

```

ggcggctgct gctccggggcc tgggcacagc aagcggcgac gtcaagctcc cgggggtggc
60
gcgggttggcg ggggcagtcg cgagcgtgag gaggtcggcg caggctacaa cagtgaggac
120
gagtatgagg cggctgcagc acgcacgag gctatggacc ctgccactgt cgagcagcag
180
gagcattggt ttgaaaaggc cctacgagac aagaagggt tcatcatcaa gcagatgaag
240
gaggatggcg cctgtctctt cggggctgta gctgaccagg tgtatggaga ccaggacatg
300
catgaggttg tgcgaaagca ttgcatggac tatctgatga agaatgccga ctacttctcc
360
aactatgtca cagaggactt taccacctac attaacagga agcggaaaaa caattgccat
420
ggcaaccaca ttgagatgca ggccatggca gagatgtaca accgtcctgt ggaggtgtac
480
cagtacagca cagaacccat caacacattc catgggatac atcaaaacga ggacgaaccc
540
attcgtgtta gctaccatcg gaatatccac tataattcag tggatgaatcc taacaaggcc
600
accattggtg tggggctggg cctgccatca ttcaaaccag ggtttgcaga gcagtctctg
660
atgaagaatg ccataaaaac atcggaggag tcatggattg aacagcagat gctagaagac
720
aagaaacggg ccacagactg ggaggccaca aatgaagcca tcgaggagca ggtggctcgg
780
gaatectacc tgcagtgggt gcgggatcag gagaaacagg ctcgccaggt ccgaggcccc
840
agccagcccc ggaaagccag cgccacatgc agttcggcca cagcagcagc ctccagtggc
900

```

ctggaggagt ggactagccg gtccccgcgg cagcggagtt cagcctcgtc acctgagcac  
960  
cctgagctgc atgctgaatt gggcatgaag ccccttccc caggcactgt tttagctctt  
1020  
gccaaacctc cttcgccctg tgcgccaggt acaagcagtc agttctcggc aggggcccagc  
1080  
cgggcaactt ccccttctgt gtccctctac cctgcttttg agtgccgggc cctcattcag  
1140  
cagatgtccc cctctgcctt tggctgaat gactgggatg atgatgagat cctagcttcg  
1200  
gtgctggcag tgtcccaaca ggaataccta gacagtatga agaaaaacaa agtgcacaga  
1260  
gacccgcccc cagacaagag ttgatggaga cccagggatt ggacaccatc tcccaacccc  
1320  
agtactcctg ctctccggtg ccacctcacc ttctttggct tcttccctct tgctccttc  
1380  
tgttctttct gctctccctt cttttccctc ctctcactt ccctctggct agccccccc  
1440  
tgcactctct ctcatggcg ctgccactat cacctgtctc tctgccagct gatgtgccct  
1500  
gttgcccccc accccatccc gcacagaacc atccctgcat tccacagggg actcgggcaa  
1560  
gggtgccgaa gatagacaag aggcacacag agacagacca actggcagcc aggcagcccc  
1620  
agaggagaga gacattcaga cagaggaaag tctccctgcc cctcattcct tccaagatga  
1680  
gaaaaacttg ccgccacccc ccgacactga tgccaggag gtgggaggaa gaagtgggaa  
1740  
atttcccttc ccagtacccc caagaacgtc tgagccttca atgttgaatt ttttctttat  
1800  
taaaattact tttatcttat aaaatcaact aatcaaaaat gatatagacg acagcactgg  
1860  
ctctgtgaag gtggcatctt tctgggcagg caggccatgg ggcattggagg aggggtgcaa  
1920  
gatatgggtt gctgtcttct ggctccagc tgcattggagg ccggcccagg gtctagggtg  
1980  
tgcactgggc aagggcaggg cggcaggtgt caggccggct tggacaatga aaccctgacc  
2040  
ttgctgcatt ccttttgctt ccaccaccac tagcttcttt ggaatcttgg ggtgggggtc  
2100  
atctttgggg attatggctg ccacccggga tttgagtgtg gggagtgtgg gagcagcctt  
2160  
ggcagatggg gcacccgtgc cctgcaggtg ttgacaagat ccgccatctg taatgtcctt  
2220  
ggcacaataa aaccaaagt cagtttccct gagcgactct gttctgtgtg gggcaggggt  
2280  
tgggcgggcc tctgggcaga ggatgcaatg gcacggacct tggcttgacc tcagaggtgt  
2340  
gaatgctctc cagcagggtc tgtctggggg cctggagttt gtatttgatt tgctgcttat  
2400  
taaacctcct tctggacctt ttgccactgg aaaaaaaaaa aaaa  
2444

&lt;210&gt; 5742

&lt;211&gt; 427

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5742

Gly Gly Cys Cys Ser Gly Pro Gly His Ser Lys Arg Arg Arg Gln Ala  
 1 5 10 15  
 Pro Gly Val Gly Ala Val Gly Gly Gly Ser Pro Glu Arg Glu Glu Val  
 20 25 30  
 Gly Ala Gly Tyr Asn Ser Glu Asp Glu Tyr Glu Ala Ala Ala Ala Arg  
 35 40 45  
 Ile Glu Ala Met Asp Pro Ala Thr Val Glu Gln Gln Glu His Trp Phe  
 50 55 60  
 Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Ile Lys Gln Met Lys  
 65 70 75 80  
 Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr Gly  
 85 90 95  
 Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr Leu  
 100 105 110  
 Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe Thr  
 115 120 125  
 Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His Ile  
 130 135 140  
 Glu Met Gln Ala Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr  
 145 150 155 160  
 Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln Asn  
 165 170 175  
 Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn  
 180 185 190  
 Ser Val Val Asn Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Leu  
 195 200 205  
 Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn Ala  
 210 215 220  
 Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu Asp  
 225 230 235 240  
 Lys Lys Arg Ala Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu Glu  
 245 250 255  
 Gln Val Ala Arg Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu Lys  
 260 265 270  
 Gln Ala Arg Gln Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser Ala  
 275 280 285  
 Thr Cys Ser Ser Ala Thr Ala Ala Ala Ser Ser Gly Leu Glu Glu Trp  
 290 295 300  
 Thr Ser Arg Ser Pro Arg Gln Arg Ser Ser Ala Ser Ser Pro Glu His  
 305 310 315 320  
 Pro Glu Leu His Ala Glu Leu Gly Met Lys Pro Pro Ser Pro Gly Thr  
 325 330 335  
 Val Leu Ala Leu Ala Lys Pro Pro Ser Pro Cys Ala Pro Gly Thr Ser  
 340 345 350  
 Ser Gln Phe Ser Ala Gly Ala Asp Arg Ala Thr Ser Pro Leu Val Ser  
 355 360 365  
 Leu Tyr Pro Ala Leu Glu Cys Arg Ala Leu Ile Gln Gln Met Ser Pro  
 370 375 380  
 Ser Ala Phe Gly Leu Asn Asp Trp Asp Asp Asp Glu Ile Leu Ala Ser

385					390					395					400
Val	Leu	Ala	Val	Ser	Gln	Gln	Glu	Tyr	Leu	Asp	Ser	Met	Lys	Lys	Asn
				405					410					415	
Lys	Val	His	Arg	Asp	Pro	Pro	Pro	Asp	Lys	Ser					
			420					425							

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<210> 5743
<211> 550
<212> DNA
<213> Homo sapiens
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<400> 5743
nngcgccaga ctcatttgcc ccgcaggtag atcttggggg tctgccagcc cttcgggggg
60
ttccttttagc cccgccttca gccagatgcg cctcaggtct ttctcgaact tgatctgctt
120
gcgtctcagg cgtccctcct ggaccttccc ctatctggct gggcggacac tggtaggatt
180
gcggtggagc cacatgtcct gcggtcccgg tatccagtct gggcaggaag cagcgggccc
240
tgagccagct ctccaggggg ctgacggaca tcttcttggg gaccagcatc tcctccagct
300
ccagctgggc ccccttgcca gggagagagg ccgccctacc tgggccggcc ggcgatgtgc
360
tgtaaagggg cccgcagacc cggctgcca actccagaga cgggccaaagg cgggcggccc
420
ccgaaaggtc ccagaacggg gaggcgggcc ccctccccgg gttcaccccc gcgcgaatcg
480
cgttgccttg cgcccnngga ccctctcggc tggacccccg gcccgctgc cgcagcgccc
540
ggcgccctca
550

```

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<210> 5744
<211> 95
<212> PRT
<213> Homo sapiens
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<400> 5744																
Arg	Thr	Ser	Ser	Trp	Gly	Pro	Ala	Ser	Pro	Pro	Ala	Pro	Ala	Gly	Pro	
1				5					10					15		
Pro	Cys	Glu	Gly	Glu	Arg	Pro	Pro	Tyr	Leu	Gly	Arg	Pro	Ala	Met	Cys	
			20					25					30			
Cys	Lys	Gly	Ala	Arg	Arg	Pro	Gly	Cys	Pro	Thr	Pro	Glu	Thr	Gly	Gln	
		35					40					45				
Gly	Gly	Arg	Pro	Pro	Lys	Gly	Pro	Arg	Thr	Gly	Arg	Pro	Ala	Pro	Ser	
	50					55					60					
Pro	Gly	Ser	Pro	Pro	Arg	Glu	Ser	Arg	Cys	Leu	Ala	Pro	Xaa	Asp	Pro	
65					70					75					80	
Leu	Gly	Trp	Thr	Pro	Gly	Pro	Pro	Ala	Ala	Ala	Pro	Gly	Ala	Leu		
				85					90					95		

<210> 5745  
<211> 849

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5745

aaagtttttt tttttttctg cttcaggcac acggggaacc acgcgtttta atcaacgtat  
 60  
 cgataaaaaa caccagggca cggacactcc aggggaaatg cttattgagt aaagtatccg  
 120  
 aggaagtgat gcagggcagg taaacagctg gtgctcagca gcgagaggac gcgtcactct  
 180  
 gccgtttctg agggtgacgc cctccccgta cctcgctgag agccacctgc agacacagca  
 240  
 ggccacagca gaatgcacag gtcactgttg taggggaaca aatcgtaatg cccagagaaa  
 300  
 acctgatagt gaaatgtaaa cagacaggac aggggtggttc caggtggcca ccaccgccag  
 360  
 gcccttcccc tgattgatct gagagcttca cagccggcgg cactgggacc catttccaga  
 420  
 aacactggaa caccaggtct ctcagatgcc cgcgggaggg gcccagggga ggcctttctc  
 480  
 agcatcagct tttgggtgac aaaccccata cagcaaaact gtacaaatac acacaacgga  
 540  
 cccccagctg acagtgagac caggacccta ggaaggtcag gtggtggtga agtcatcccc  
 600  
 tctccaaccg agcagagcct ggggttgggc tctgatgacc tcccgggcaa agtgtccagg  
 660  
 tggaggaagc aaactcccaa atggggcaca aaggtaataa aaagcagctg agagattgcg  
 720  
 ggatggggtc ggggccactt ggccgacacc ttctgcctcg cctggccggg ccgggccagc  
 780  
 ctctcgccac aggatggagg gtgactgtgc acctgctcc atgtacagga cgggttgagg  
 840  
 gtcccatgg  
 849

&lt;210&gt; 5746

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5746

Met Thr Ser Pro Pro Pro Asp Leu Pro Arg Val Leu Val Ser Leu Ser  
 1 5 10 15  
 Ala Gly Gly Pro Leu Cys Val Phe Val Gln Phe Cys Cys Met Gly Phe  
 20 25 30  
 Val Thr Gln Lys Leu Met Leu Arg Lys Ala Ser Leu Gly Pro Leu Pro  
 35 40 45  
 Arg Ala Ser Glu Arg Pro Gly Val Pro Val Phe Leu Glu Met Gly Pro  
 50 55 60  
 Ser Ala Ala Gly Cys Glu Ala Leu Arg Ser Ile Thr Gly Arg Ala Trp  
 65 70 75 80  
 Arg Trp Trp Pro Pro Gly Thr Thr Leu Ser Cys Leu Phe Thr Phe His  
 85 90 95  
 Tyr Gln Val Phe Ser Gly His Tyr Asp Leu Phe Pro Tyr Asn Ser Asp



			100					105					110			
Leu	Cys	Ile	Leu	Leu	Trp	Pro	Ala	Val	Ser	Ala	Gly	Gly	Ser	Gln	Arg	
			115				120						125			
Gly	Thr	Gly	Arg	Ala	Ser	Pro	Cys	Arg	Thr	Ala	Glu					
			130				135				140					

```
<210> 5747
<211> 1999
<212> DNA
<213> Homo sapiens
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<400> 5747  
nccatggcccc agtccggcgaggaggctcgg cccggggccca agacggcggt gcagatccgc  
60  
gtcgccatcc aggaggccga ggacgtggac gagttggagg acgaggagga gggggcggag  
120  
actcggggcg ccggggaccc ggcccgttac ctcagccccg gctggggcag cgcgagcgag  
180  
gaggagccga gccgcgggca cagtggcacc actgcaagtg gaggtgagaa cgagcgtgag  
240  
gacctggagc aggagtggaa gccccggat gaggagttga tcaagaaact ggtggatcag  
300  
atcgaattct acttttctga tgaaaacctg gagaaggacg cttttttgct aaaacacgtg  
360  
aggaggaaca agctgggata tgtgagcgtt aagctactca catccttcaa aaaggtgaaa  
420  
catcttacac gggactggag aaccacagca catgctttga agtattcagt ggtccttgag  
480  
ttgaatgagg accaccggaa ggtgaggagg accacccccg tccactgtt cccaacgag  
540  
aacctcccca gcaagatgct cctggtctat gatctctact tgtctcctaa gctgtgggct  
600  
ctggccaccc ccagaagaa tggaaggggtg caagagaagg tgatggaaca cctgctcaag  
660  
cttttcggga cttttggagt catctcatca gtgcggatcc tcaaacctgg gagagagctg  
720  
ccccctgaca tccggaggat cagcagccgc tacagccaag tggggaccca ggagtgtgcc  
780  
atcgtggagt tccaggagggt ggaagcagcc atcaaagccc atgagttcat gatcacagaa  
840  
tctcagggca aagagaacat gaaagctgtc ctgattggta tgaagccacc caaaaagaaa  
900  
cctgccaaag acaaaaatca tgacgaggag ccactgcga gcatccacct gaacaagtcc  
960  
ctgaacaaga gagtccagga gcttcagtag atgggtgatg agtcttctgc caacagctcc  
1020  
tctgaccccc agagcaaccc cacatcccct atggcgggcc gacggcacgc ggccaccaac  
1080  
aagctcagcc cgtctggcca ccagaatctc tttctgagtc caaatgcctc cccgtgcaca  
1140  
agtccttgga gcagcccctt ggcccaacgc aaaggcggtt ccagaaagtc cccactggcg  
1200  
gaggaaggta gactgaactg cagcaccagc cctgagatct tccgcaagtg tatggattat  
1260

tcctctgaca gcagcgtcac tccctctggc agcccctggg tccggaggcg tcgccaagcc  
 1320  
 gagatgggga cccaggagaa aagccccggg acgagtcccc tgctctcccg gaagatgcag  
 1380  
 actgcagatg ggctacccgt aggggtgctg aggttgccca ggggtcctga caacaccaga  
 1440  
 ggatttcatt gccatgagag gagcagggcc tgtgtataaa taccttctat ttttaataca  
 1500  
 agtccactg aaaaccacct tcgttttcaa ggttctgaca aacacctggc atgacagaat  
 1560  
 ggaattcggt cccctttgag agatttttta ttcattgtaga cctcttaatt tatctatctg  
 1620  
 taatatacat aaatcggtac gccatgggtt gaagaccacc ttctagttca ggactcctgt  
 1680  
 tcttcccagc atggccacta ttttgatgat ggctgatgtg tgtgagtgtg atggccctga  
 1740  
 agggctgtag gacggagggt cctggggga agtctgttct ttggatgga atttttctct  
 1800  
 cttctttggt atggaatttt tcccttcagt gactgagctg tcctcgatag gccatgcaag  
 1860  
 ggcttcctga gagttcagga aagttctctt gtgcaacagc aagtagctaa gcctatagca  
 1920  
 tgggtgtctt taggaccaa tcgatgttac ctgtcaagta aataaataat aaaacaccca  
 1980  
 aaaaaaaaaa aaaaaaaaaa  
 1999

&lt;210&gt; 5748

&lt;211&gt; 492

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5748

Xaa	Met	Ala	Gln	Ser	Gly	Gly	Glu	Ala	Arg	Pro	Gly	Pro	Lys	Thr	Ala
1				5					10					15	
Val	Gln	Ile	Arg	Val	Ala	Ile	Gln	Glu	Ala	Glu	Asp	Val	Asp	Glu	Leu
			20					25					30		
Glu	Asp	Glu	Glu	Glu	Gly	Ala	Glu	Thr	Arg	Gly	Ala	Gly	Asp	Pro	Ala
		35				40					45				
Arg	Tyr	Leu	Ser	Pro	Gly	Trp	Gly	Ser	Ala	Ser	Glu	Glu	Glu	Pro	Ser
	50				55				60						
Arg	Gly	His	Ser	Gly	Thr	Thr	Ala	Ser	Gly	Gly	Glu	Asn	Glu	Arg	Glu
65				70					75				80		
Asp	Leu	Glu	Gln	Glu	Trp	Lys	Pro	Pro	Asp	Glu	Glu	Leu	Ile	Lys	Lys
			85				90					95			
Leu	Val	Asp	Gln	Ile	Glu	Phe	Tyr	Phe	Ser	Asp	Glu	Asn	Leu	Glu	Lys
		100				105						110			
Asp	Ala	Phe	Leu	Leu	Lys	His	Val	Arg	Arg	Asn	Lys	Leu	Gly	Tyr	Val
	115				120						125				
Ser	Val	Lys	Leu	Leu	Thr	Ser	Phe	Lys	Lys	Val	Lys	His	Leu	Thr	Arg
	130				135					140					
Asp	Trp	Arg	Thr	Thr	Ala	His	Ala	Leu	Lys	Tyr	Ser	Val	Val	Leu	Glu
145				150					155				160		
Leu	Asn	Glu	Asp	His	Arg	Lys	Val	Arg	Arg	Thr	Thr	Pro	Val	Pro	Leu

					165					170					175	
Phe	Pro	Asn	Glu	Asn	Leu	Pro	Ser	Lys	Met	Leu	Leu	Val	Tyr	Asp	Leu	
			180					185					190			
Tyr	Leu	Ser	Pro	Lys	Leu	Trp	Ala	Leu	Ala	Thr	Pro	Gln	Lys	Asn	Gly	
		195					200					205				
Arg	Val	Gln	Glu	Lys	Val	Met	Glu	His	Leu	Leu	Lys	Leu	Phe	Gly	Thr	
	210					215					220					
Phe	Gly	Val	Ile	Ser	Ser	Val	Arg	Ile	Leu	Lys	Pro	Gly	Arg	Glu	Leu	
225					230					235					240	
Pro	Pro	Asp	Ile	Arg	Arg	Ile	Ser	Ser	Arg	Tyr	Ser	Gln	Val	Gly	Thr	
				245					250					255		
Gln	Glu	Cys	Ala	Ile	Val	Glu	Phe	Glu	Glu	Val	Glu	Ala	Ala	Ile	Lys	
			260					265					270			
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<211> 2849

<212> DNA

<213> Homo sapiens

<400> 5749

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<212> PRT

<213> Homo sapiens

<400> 5750

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&lt;211&gt; 926

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5751

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&lt;210&gt; 5752

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5752

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&lt;400&gt; 5753

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&lt;210&gt; 5754

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5754

Asp Ser Leu Glu Ser Asn Ile Ser Asp Gln Asp Ser Asp Ser Asn Met

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20	25	30	
Phe Pro Asn His Thr Asp Asn Leu Asn Ser Ser Gln Arg Leu Ser Pro			
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Ser Ser Arg Met Arg Lys Leu Pro Gln Gly Arg Pro Val Pro Pro Leu			
50	55	60	
Gly Pro Glu Thr Arg Val Ser Val Val Trp Val Glu Arg Tyr Asp Asp			
65	70	75	80
Ile Glu Asn Phe Pro Leu Ser Glu Leu Met Thr Glu Ile Ser Thr Gly			
85	90	95	
Val Glu Thr Thr Ala Asn Ser Ser Thr Ser Leu Arg Ser Thr Thr Leu			
100	105	110	
Glu Lys Glu Val Pro Val Ile Phe Ile His Pro Leu Asn Thr Gly Leu			
115	120	125	
Phe Arg Ile Lys Ile <del>Gln</del> Gln Gly Ala Thr Gly Lys Phe Asn Met Val Ile			
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Val Arg Gln Thr Val Ile Asn Ile Cys Arg Arg Lys Arg Leu Glu Ser			
165	170	175	
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180	185	190	
Ile Val Asn Lys Tyr Arg Asn Lys Gln Leu Glu Pro Glu Phe Tyr Thr			
195	200	205	
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210	215	220	

&lt;210&gt; 5755

&lt;211&gt; 1513

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5755

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<210> 5756

<211> 415

<212> PRT

<213> Homo sapiens

<400> 5756

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			20					25					30		
Ala	Ala	Leu	Leu	Ala	Gln	Asp	Tyr	Cys	Asp	Ala	Ile	Asp	Leu	Asn	Leu
			35				40					45			
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		50				55					60				
Gln	Asp	Glu	Trp	Asp	Leu	Leu	Gln	Arg	Met	Ile	Leu	Leu	Ala	His	Glu
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			85						90					95	
Asp	Lys	Thr	Val	Arg	Tyr	Ala	Gln	Met	Leu	Glu	Lys	Ala	Gly	Cys	Gln
			100					105					110		
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145	150	155
Arg Cys Leu Arg Asp Thr Gly Val Gln Gly Val Met Ser Ala Glu Gly		
165	170	175
Asn Leu His Asn Pro Ala Leu Phe Glu Gly Arg Ser Pro Ala Val Trp		
180	185	190
Glu Leu Ala Glu Glu Tyr Leu Asp Ile Val Arg Glu His Pro Cys Pro		
195	200	205
Leu Ser Tyr Val Arg Ala His Leu Phe Lys Leu Trp His His Thr Leu		
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245	250	255
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260	265	270
His Trp Ile Cys Gln Pro Tyr Ile Arg Pro Gly Pro Arg Glu Gly Ser		
275	280	285
Lys Glu Lys Ala Gly Ala Arg Ser Lys Arg Ala Leu Glu Glu Glu Glu		
290	295	300
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305	310	315
Asn Pro His Lys Thr Phe Asp Pro Ser Leu Lys Pro Lys Tyr Ala Lys		
325	330	335
Cys Asp Gln Cys Gly Asn Pro Lys Gly Asn Arg Cys Val Phe Ser Leu		
340	345	350
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355	360	365
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370	375	380
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&lt;210&gt; 5757

&lt;211&gt; 2362

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5757

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<210> 5758

<211> 440

<212> PRT

<213> Homo sapiens.

<400> 5758

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		35				40						45			
Phe	Ala	Trp	Glu	Ser	Ala	Asp	Ser	Gly	Leu	Glu	Val	Cys	Pro	Glu	Asp
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Ile	Tyr	Gly	Val	Gln	Glu	Val	His	Val	Asn	Gly	Ala	Val	Val	Leu	Ala
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Phe	Glu	Leu	Tyr	Tyr	His	Thr	Thr	Gln	Asp	Leu	Gln	Leu	Phe	Arg	Glu
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Gly	Gly	Gly	Trp	Glu	Val	Val	Arg	Ala	Val	Ala	Lys	Phe	Trp	Cys	Ser
			100					105					110		
Arg	Val	Glu	Trp	Ser	Pro	Arg	Glu	Glu	Lys	Tyr	His	Leu	Arg	Gly	Val
		115					120					125			
Met	Ser	Pro	Asp	Glu	Tyr	His	Ser	Gly	Val	Asn	Asn	Ser	Val	Tyr	Thr
		130				135					140				
Asn	Val	Leu	Val	Gln	Asn	Ser	Leu	Arg	Phe	Ala	Ala	Ala	Leu	Ala	Gln
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			165					170						175	
Ile	Lys	Val	Pro	Phe	Asp	Val	Glu	Gln	Asn	Phe	His	Pro	Glu	Phe	Asp
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Gly	Tyr	Glu	Pro	Gly	Glu	Val	Val	Lys	Gln	Ala	Asp	Val	Val	Leu	Leu
		195				200						205			
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<210> 5759
<211> 1333
<212> DNA
<213> Homo sapiens
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<210> 5760

<211> 273

<212> PRT

<213> Homo sapiens

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Met	Ile	Arg	Pro	Arg	Gly	Gly	Asp	Phe	Leu	Tyr	Ser	Asp	Arg	Glu	Ile
			85				90					95			
Glu	Val	Met	Lys	Ala	Asp	Ile	Arg	Leu	Ala	Lys	Leu	Tyr	Gly	Ala	Asp
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	130				135					140					
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<211> 1452
<212> DNA
<213> Homo sapiens
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1020

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<211> 3840

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<213> Homo sapiens

<400> 5764

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&lt;213&gt; Homo sapiens

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Arg	Val	Lys	Phe	Ser	Pro	Ser	Leu	Thr	Leu	Phe	Gly	Gly	Lys	Pro	Met
			165						170					175	
Glu	Gly	Trp	Ile	Ala	Val	Thr	Val	Ser	Gly	Leu	Val	Thr	Val	Ser	Leu
			180					185					190		
Leu	Lys	Pro	Ser	Gly	Gln	Val	Leu	Thr	Ser	Thr	Glu	Ser	Leu	Cys	Arg
		195					200					205			
Leu	Arg	Gly	Arg	Val	Ala	Leu	Ala	Asp	Ile	Ala	Phe	Thr	Gly	Gly	Gly
	210					215					220				
Asn	Ile	Val	Val	Ala	Thr	Ala	Asp	Gly	Ser	Ser	Ala	Ser	Pro	Val	Gln
225					230					235				240	
Phe	Tyr	Lys	Val	Cys	Val	Ser	Val	Val	Ser	Glu	Lys	Cys	Arg	Ile	Asp
			245						250					255	
Thr	Glu	Ile	Leu	Pro	Ser	Leu	Phe	Met	Arg	Cys	Thr	Thr	Asp	Leu	Asn
			260					265					270		
Arg	Lys	Asp	Lys	Phe	Pro	Ala	Ile	Thr	His	Leu	Lys	Phe	Leu	Ala	Arg
		275					280					285			
Asp	Met	Ser	Glu	Gln	Val	Leu	Leu	Cys	Ala	Ser	Ser	Gln	Thr	Ser	Ser
	290					295					300				
Ile	Val	Glu	Cys	Trp	Ser	Leu	Arg	Lys	Glu	Gly	Leu	Pro	Val	Asn	Asn
305					310					315				320	
Ile	Phe	Gln	Gln	Ile	Ser	Pro	Val	Val	Gly	Asp	Lys	Gln	Pro	Thr	Ile
			325						330					335	
Leu	Lys	Trp	Arg	Ile	Leu	Ser	Ala	Thr	Asn	Asp	Leu	Asp	Arg	Val	Ser

340 345 350  
 Ala Val Ala Leu Pro Lys Leu Pro Ile Ser Leu Thr Asn Thr Asp Leu  
 355 360 365  
 Lys Val Ala Ser Asp Thr Gln Phe Tyr Pro Gly Leu Gly Leu Ala Leu  
 370 375 380  
 Ala Phe His Asp Gly Ser Val His Ile Val His Arg Leu Ser Leu Gln  
 385 390 395 400  
 Thr Met Ala Val Phe Tyr Ser Ser Ala Ala Pro Arg Pro Val Asp Glu  
 405 410 415  
 Pro Ala Met Lys Arg Pro Arg Thr Ala Gly Pro Ala Val His Leu Lys  
 420 425 430  
 Ala Met Gln Leu Ser Trp Thr Ser Leu Ala Leu Val Gly Ile Asp Ser  
 435 440 445  
 His Gly Lys Leu Ser Val Leu Arg Leu Ser Pro Ser Met Gly His Pro  
 450 455 460  
 Leu Glu Val Gly Leu Ala Leu Arg His Leu Leu Phe Leu Leu Glu Tyr  
 465 470 475 480  
 Cys Met Val Thr Gly Tyr Asp Trp Trp Asp Ile Leu Leu His Val Gln  
 485 490 495  
 Pro Ser Met Val Gln Ser Leu Val Glu Lys Leu His Glu Glu Tyr Thr  
 500 505 510  
 Arg Gln Thr Ala Ala Leu Gln Gln Val Leu Ser Thr Arg Ile Leu Ala  
 515 520 525  
 Met Lys Ala Ser Leu Cys Lys Leu Ser Pro Cys Thr Val Thr Arg Val  
 530 535 540  
 Cys Asp Tyr His Thr Lys Leu Phe Leu Ile Ala Ile Ser Ser Thr Leu  
 545 550 555 560  
 Lys Ser Leu Leu Arg Pro His Phe Leu Asn Thr Pro Asp Lys Ser Pro  
 565 570 575  
 Gly Asp Arg Leu Thr Glu Ile Cys Thr Lys Ile Thr Asp Val Asp Ile  
 580 585 590  
 Asp Lys Val Met Ile Asn Leu Lys Thr Glu Glu Phe Val Leu Asp Met  
 595 600 605  
 Thr His Cys Arg Arg Cys Ser Ser Cys Ser Gly Trp Ala Thr Ser  
 610 615 620  
 Cys Cys Thr Cys Trp Pro Ala Tyr Pro Thr Ser Pro Ala Pro Pro Arg  
 625 630 635 640  
 Ser Pro Ala Pro Pro Arg Ser Pro Pro Pro Arg Ser Pro Pro Pro  
 645 650 655  
 Pro Arg Ser Pro Pro Leu His Glu Ala Ser Ala Gly Ser Leu Leu Arg  
 660 665 670  
 Pro Gly His Ser Phe Leu Arg Asp Gly Thr Ser Leu Gly Met Leu Arg  
 675 680 685  
 Glu Leu Met Val Val Ile Arg Ile Trp Gly Leu Leu Lys Pro Ser Cys  
 690 695 700  
 Leu Pro Val Tyr Thr Ala Thr Ser Asp Thr Gln Asp Ser Met Ser Leu  
 705 710 715 720  
 Leu Phe Arg Leu Leu Thr Lys Leu Trp Ile Cys Cys Arg Asp Glu Gly  
 725 730 735  
 Pro Ala Ser Glu Pro Asp Glu Ala Leu Val Asp Glu Cys Cys Leu Leu  
 740 745 750  
 Pro Ser Gln Leu Leu Ile Pro Ser Leu Asp Trp Leu Pro Ala Ser Asp  
 755 760 765  
 Gly Leu Val Ser Arg Leu Gln Pro Lys Gln Pro Leu Arg Leu Gln Phe

770		775		780
Gly Arg Ala Pro Thr Leu Pro Gly Ser Ala Ala Thr Leu Gln Leu Asp				
785		790		795
Gly Leu Ala Arg Ala Pro Gly Gln Pro Lys Ile Asp His Leu Arg Arg				800
	805		810	815
Leu His Leu Gly Ala Cys Pro Thr Glu Glu Cys Lys Ala Cys Thr Arg				
	820		825	830
Cys Gly Cys Val Thr Met Leu Lys Ser Pro Asn Arg Thr Thr Ala Val				
	835		840	845
Lys Gln Trp Glu Gln Arg Trp Ile Lys Asn Cys Leu Cys Gly Gly Leu				
	850		855	860
Trp Trp Arg Val Pro Leu Ser Tyr Pro				
865		870		

&lt;210&gt; 5767

&lt;211&gt; 1910

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5767

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120
tcagtatcgt gggttttgct gctattctga agggatcccc catcacgctg gcagctgtgt
180
gccaggagag accctgaggg ctgcctcacc acagcaggaa cgccttctc agtcccagcc
240
caatcctctc tcacactgcg gtgctctgtc cctatggaaa cagcctctgt atgtgtgtgt
300
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360
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420
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480
aaataagtga aaaggcattg agagattgct aagatttggt aagttaaaac aataatatat
540
ctagaaaaga ctgtgaaaat atatatctca aaagagaaca aggcatagtc agaaggctca
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660
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720
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780
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gatgccggtt caaaaacgtc atcatcatct tctgctcctt cttctatcgg tttcatcttg
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960
agaaactggt gcaagccgtc gtcactgtca ctggagctgg ctatactgtt cctcatttcc
1020

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aacatggaga tctgtgtgca gaggtgagc tgatgttcca gctttttggc tttcttatca  
 1080  
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 1140  
 ctaaagattt catacaagaa aggttctgat tccagaaagt atgttaatct ttctcttgac  
 1200  
 cagcataaaa atctgcagtt atcatctgca ataatgggtga cctggaattt ttcacctttg  
 1260  
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 1320  
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 1620  
 gcacatcggg agagagtggc ccagacgata taaagggtac atcctagagt taacattccc  
 1680  
 ctaagaaata tcatatgaag gtgaagagta gttggaataa ccaaccaac tgcaaaacaa  
 1740  
 atatttgcta catgaaaaac cagatgatgt atctctctcc agttttcaca agtgggtctta  
 1800  
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 1860  
 ctcaatgggc tggactctgt ataattcatt ttgaaaatcc cggctgggtcc  
 1910

&lt;210&gt; 5768

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5768

Met	Asn	Tyr	Thr	Glu	Ser	Ser	Pro	Leu	Arg	Glu	Ser	Thr	Ala	Ile	Gly
1				5				10						15	
Phe	Thr	Pro	Glu	Leu	Glu	Ser	Ile	Ile	Pro	Val	Pro	Ser	Asn	Lys	Thr
			20					25					30		
Thr	Cys	Glu	Asn	Trp	Arg	Glu	Ile	His	His	Leu	Val	Phe	His	Val	Ala
			35				40						45		
Asn	Ile	Cys	Phe	Ala	Val	Gly	Leu	Val	Ile	Pro	Thr	Thr	Leu	His	Leu
			50			55					60				
His	Met	Ile	Phe	Leu	Arg	Gly	Met	Leu	Thr	Leu	Gly	Cys	Thr	Leu	Tyr
65					70					75				80	
Ile	Val	Trp	Ala	Thr	Leu	Tyr	Arg	Cys	Ala	Leu	Asp	Ile	Met	Ile	Trp
			85					90						95	
Asn	Ser	Val	Phe	Leu	Gly	Val	Asn	Ile	Leu	His	Leu	Ser	Tyr	Leu	Leu
			100					105					110		
Tyr	Lys	Lys	Arg	Pro	Val	Lys	Ile	Glu	Lys	Glu	Leu	Ser	Gly	Met	Tyr
			115				120						125		
Arg	Arg	Leu	Phe	Glu	Pro	Leu	Arg	Val	Pro	Pro	Asp	Leu	Phe	Arg	Arg

130	135	140
Leu Thr Gly Gln Phe Cys Met Ile Gln Thr Leu Lys Lys Gly Gln Thr		
145	150	155
Tyr Ala Ala Glu Asp Lys Thr Ser Val Asp Asp Arg Leu Ser Ile Leu		160
	165	170
Leu Lys Gly Lys Met Lys Val Ser Tyr Arg Gly His Phe Leu His Asn		175
	180	185
Ile Tyr Pro Cys Ala Phe Ile Asp Ser Pro Glu Phe Arg Ser Thr Gln		190
	195	200
Met His Lys Gly Glu Lys Phe Gln Val Thr Ile Ile Ala Asp Asp Asn		205
	210	215
Cys Arg Phe Leu Cys Trp Ser Arg Glu Arg Leu Thr Tyr Phe Leu Glu		220
225	230	235
Ser Glu Pro Phe Leu Tyr Glu Ile Phe Arg Tyr Leu Ile Gly Lys Asp		240
	245	250
Ile Thr Asn Lys Leu Tyr Ser Leu Asn Asp Pro Thr Leu Asn Asp Lys		255
	260	265
Lys Ala Lys Lys Leu Glu His Gln Leu Ser Leu Cys Thr Gln Ile Ser		270
	275	280
Met Leu Glu Met Arg Asn Ser Ile Ala Ser Ser Ser Asp Ser Asp Asp		285
	290	295
Gly Leu His Gln Phe Leu Arg Ser Thr Ser Ser Met Ser Ser Leu His		300
305	310	315
Val Ser Ser Pro His Gln Arg Ala Ser Ala Lys Met Lys Pro Ile Glu		320
	325	330
Glu Gly Ala Glu Asp Asp Asp Val Phe Glu Pro Ala Ser Pro Asn		335
	340	345
Thr Leu Lys Val His Gln Leu Pro		350
	355	360

&lt;210&gt; 5769

&lt;211&gt; 427

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5769

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120  
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180  
gtaaaggaga gcaaattgag ttcttcaatg aatagcatca agatcttctg gggcccagag  
240  
ctgaagaagg aacgagccct gagaaaggat gaagcttcca aaatcccat ttggaaggaa  
300  
cagtacagag ttgtacaaga ggaaaaccag gtaagttcta cgtgtgttta cctttattgg  
360  
ctgaattcat gtatataaat gaaatagcct tttttttccc ctttctaga tttttccctt  
420  
cacgcgt  
427

&lt;210&gt; 5770

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5770

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Leu Gln Thr Gln Leu Lys Glu Val Leu Arg Glu Asn Asp Leu Leu Arg
 1           5           10           15
Lys Asp Val Glu Val Lys Glu Ser Lys Leu Ser Ser Ser Met Asn Ser
          20           25           30
Ile Lys Ile Phe Trp Gly Pro Glu Leu Lys Lys Glu Arg Ala Leu Arg
          35           40           45
Lys Asp Glu Ala Ser Lys Ile Pro Ile Trp Lys Glu Gln Tyr Arg Val
          50           55           60
Val Gln Glu Glu Asn Gln Val Ser Ser Thr Cys Val Tyr Leu Tyr Trp
65           70           75           80
Leu Asn Ser Cys Ile
                  85

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&lt;210&gt; 5771

&lt;211&gt; 2539

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5771

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120
gtcagatgtg ccaccccgcc acaactggcc aatgggggtga cggaaggcct ggactatggc
180
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240
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300
ggacctcctg aagatcttgc ccatgggttc cctaattggtt tttcctttat tcatgggggc
360
catatacagt atcagtgtct tcttggttat aagctccatg gaaattcatc aagaagggtg
420
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480
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840
aatgcagtgg caactggaga ggcacacacc tatgaaagtg aagtgaaact cagatgtctg
900

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1020  
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1620  
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1680  
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1920  
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1980  
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2040  
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2160  
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2280  
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2340  
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2400  
atattaaata gatgtgtctc taccctcaca aaatgtacat attctgtgtg ctattgggaa  
2460  
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2520

tgctactaaa taaaaaaaaa  
2539

<210> 5772

<211> 642

<212> PRT

<213> Homo sapiens

<400> 5772

Tyr	Thr	Cys	Asn	Glu	Gly	Phe	Leu	Leu	Glu	Gly	Ala	Arg	Ser	Arg	Val
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Cys	Leu	Ala	Asn	Gly	Ser	Trp	Ser	Gly	Ala	Thr	Pro	Asp	Cys	Val	Pro
			20					25					30		
Val	Arg	Cys	Ala	Thr	Pro	Pro	Gln	Leu	Ala	Asn	Gly	Val	Thr	Glu	Gly
		35					40					45			
Leu	Asp	Tyr	Gly	Phe	Met	Lys	Glu	Val	Thr	Phe	His	Cys	His	Gly	Leu
	50					55					60				
His	Leu	Ala	Arg	Cys	Ser	Lys	Thr	His	Leu	Ser	Val	Arg	Gly	Asn	Trp
65					70					75				80	
Asp	Ala	Glu	Ile	Pro	Leu	Cys	Lys	Pro	Val	Asn	Cys	Gly	Pro	Pro	Glu
				85					90					95	
Asp	Leu	Ala	His	Gly	Phe	Pro	Asn	Gly	Phe	Ser	Phe	Ile	His	Gly	Gly
			100					105					110		
His	Ile	Gln	Tyr	Gln	Cys	Phe	Pro	Gly	Tyr	Lys	Leu	His	Gly	Asn	Ser
		115					120					125			
Ser	Arg	Arg	Cys	Leu	Ser	Asn	Gly	Ser	Trp	Ser	Gly	Ser	Ser	Pro	Ser
	130					135					140				
Cys	Leu	Pro	Cys	Arg	Cys	Ser	Thr	Pro	Val	Ile	Glu	Tyr	Gly	Thr	Val
145				150						155					160
Asn	Gly	Thr	Asp	Phe	Asp	Cys	Gly	Lys	Ala	Ala	Arg	Ile	Gln	Cys	Phe
			165					170						175	
Lys	Gly	Phe	Lys	Leu	Leu	Gly	Leu	Ser	Glu	Ile	Thr	Cys	Glu	Ala	Asp
			180					185					190		
Gly	Gln	Trp	Ser	Ser	Gly	Phe	Pro	His	Cys	Glu	His	Thr	Ser	Cys	Gly
		195					200					205			
Ser	Leu	Pro	Met	Ile	Pro	Asn	Ala	Phe	Ile	Ser	Glu	Thr	Ser	Ser	Trp
	210					215					220				
Lys	Glu	Asn	Val	Ile	Thr	Tyr	Ser	Cys	Arg	Ser	Gly	Tyr	Val	Ile	Gln
225					230					235					240
Gly	Ser	Ser	Asp	Leu	Ile	Cys	Thr	Glu	Lys	Gly	Val	Trp	Asn	Gln	Pro
			245						250					255	
Tyr	Pro	Val	Cys	Glu	Pro	Leu	Ser	Cys	Gly	Ser	Pro	Pro	Ser	Val	Ala
			260					265						270	
Asn	Ala	Val	Ala	Thr	Gly	Glu	Ala	His	Thr	Tyr	Glu	Ser	Glu	Val	Lys
		275					280					285			
Leu	Arg	Cys	Leu	Glu	Gly	Tyr	Thr	Met	Asp	Thr	Asp	Thr	Asp	Thr	Ile
	290					295					300				
Thr	Cys	Gln	Lys	Asp	Gly	Arg	Trp	Phe	Pro	Glu	Arg	Ile	Ser	Cys	Ser
305					310					315					320
Pro	Lys	Lys	Cys	Pro	Leu	Pro	Glu	Asn	Ile	Thr	His	Ile	Leu	Val	His
			325					330						335	
Gly	Asp	Asp	Phe	Ser	Val	Asn	Arg	Gln	Val	Ser	Val	Ser	Cys	Ala	Glu
		340						345					350		
Gly	Tyr	Thr	Phe	Glu	Gly	Val	Asn	Ile	Ser	Val	Cys	Gln	Leu	Asp	Gly

355	360	365
Thr Trp Glu Pro Pro Phe Ser Asp Glu Ser Cys Ser Pro Val Ser Cys		
370	375	380
Gly Lys Pro Glu Ser Pro Glu His Gly Phe Val Val Gly Ser Lys Tyr		
385	390	395
Thr Phe Glu Ser Thr Ile Ile Tyr Gln Cys Glu Pro Gly Tyr Glu Leu		
405	410	415
Glu Gly Asn Arg Glu Arg Val Cys Gln Glu Asn Arg Gln Trp Ser Gly		
420	425	430
Gly Val Ala Ile Cys Lys Glu Thr Arg Cys Glu Thr Pro Leu Glu Phe		
435	440	445
Leu Asn Gly Lys Ala Asp Ile Glu Asn Arg Thr Thr Gly Pro Asn Val		
450	455	460
Val Tyr Ser Cys Asn Arg Gly Tyr Ser Leu Glu Gly Pro Ser Glu Ala		
465	470	475
His Cys Thr Glu Asn Gly Thr Trp Ser His Pro Val Pro Leu Cys Lys		
485	490	495
Pro Asn Pro Cys Pro Val Pro Phe Val Ile Pro Glu Asn Ala Leu Leu		
500	505	510
Ser Glu Lys Glu Phe Tyr Val Asp Gln Asn Val Ser Ile Lys Cys Arg		
515	520	525
Glu Gly Phe Leu Leu Gln Gly His Gly Ile Ile Thr Cys Asn Pro Asp		
530	535	540
Glu Thr Trp Thr Gln Thr Ser Ala Lys Cys Glu Lys Ile Ser Cys Gly		
545	550	555
Pro Pro Ala His Val Glu Asn Ala Ile Ala Arg Gly Val His Tyr Gln		
565	570	575
Tyr Gly Asp Met Ile Thr Tyr Ser Cys Tyr Ser Gly Tyr Met Leu Glu		
580	585	590
Gly Phe Leu Arg Ser Val Cys Leu Glu Asn Gly Thr Trp Thr Ser Pro		
595	600	605
Pro Ile Cys Arg Ala Val Cys Arg Phe Pro Cys Gln Asn Gly Gly His		
610	615	620
Leu Pro Thr Pro Lys Cys Leu Phe Leu Ser Arg Gly Leu Asp Gly Ala		
625	630	635
Pro Leu		640

&lt;210&gt; 5773

&lt;211&gt; 579

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5773

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120
agccgggtccc ggtcgcgatc ccgggacaag gagcgcgtgc ggaagcgttc caaatctcgg
180
gaaagtaaac ggaaccggcg gcgggagtcg cggtcccgtt cgcgctccac caacacggcc
240
gtgtcccggc gcgagcggga ccgggagcgc cctcgtcccc gcccgaccgc atcgacatct
300

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 420  
 tcatcgagga agaaacagca cgaagagtag aagaattggt agcaanaaag ggtggaggaa  
 480  
 gaactggaga aaaggaagga tgaaattgaa cgagaagttc tccgaagggt ggaggaagcc  
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<210> 5774

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5774

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			20					25					30		
Ser	Ser	Lys	His	Asn	Lys	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg
		35					40					45			
Asp	Lys	Glu	Arg	Val	Arg	Lys	Arg	Ser	Lys	Ser	Arg	Glu	Ser	Lys	Arg
	50					55					60				
Asn	Arg	Arg	Arg	Glu	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Thr	Asn	Thr	Ala
65					70					75				80	
Val	Ser	Arg	Arg	Glu	Arg	Asp	Arg	Glu	Arg	Pro	Arg	Pro	Arg	Pro	Thr
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Ala	Ser	Thr	Ser	Ser	Gly	Ala	Arg								
			100												

<210> 5775

<211> 1441

<212> DNA

<213> Homo sapiens

<400> 5775

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 720  
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 780  
 accttcacgc gcagctccaa cctcatcaag caccaggtca tccacagcgg cgagcggccc  
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 960  
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 1441

<210> 5776

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5776

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Leu	Gln	Asp	Val	Glu	Glu	Val	Glu	Ile	Gly	Arg	Asp	Thr	Phe	Trp	Pro
			20					25					30		
Asp	Ser	Glu	Pro	Lys	Pro	Glu	Gln	Ala	Pro	Arg	Ser	Pro	Gly	Ser	Gln
			35					40				45			
Ala	Pro	Asp	Glu	Gly	Ala	Gly	Gly	Ala	Leu	Arg	Thr	Ser	Val	Arg	Ser
			50				55				60				
Leu	Pro	Arg	Arg	Ala	Arg	Cys	Ser	Ala	Gly	Phe	Gly	Pro	Glu	Ser	Ser
65					70				75					80	
Ala	Glu	Arg	Pro	Ala	Gly	Gln	Pro	Pro	Gly	Ala	Val	Pro	Cys	Ala	Gln
				85					90					95	
Pro	Arg	Gly	Ala	Trp	Arg	Val	Thr	Leu	Val	Gln	Gln	Ala	Ala	Ala	Gly

100	105	110
Pro Glu Gly Ala Pro Glu Arg Ala Ala Glu Leu Gly Val Asn Phe Gly		
115	120	125
Arg Ser Arg Gln Gly Ser Ala Arg Gly Thr Lys Pro His Arg Cys Glu		
130	135	140
Ala Cys Gly Lys Ser Phe Lys Tyr Asn Ser Leu Leu Leu Lys His Gln		
145	150	155
Arg Ile His Thr Gly Glu Lys Pro Tyr Ala Cys His Glu Cys Gly Lys		
165	170	175
Cys Phe Ala Ala Ala Ser Arg Phe Ile Gln His Gln Arg Ile His Ser		
180	185	190
Gly Glu Lys Pro Tyr Ala Cys Pro Glu Cys Ser Lys Thr Phe Thr Arg		
195	200	205
Ser Ser Asn Leu Ile Lys His Gln Val Ile His Ser Gly Glu Arg Pro		
210	215	220
Phe Ala Cys Gly Asp Cys Gly Lys Leu Phe Arg Arg Ser Phe Ala Leu		
225	230	235
Leu Glu His Ala Arg Val His Ser Gly Glu Lys Pro Tyr Glu Cys Ser		
245	250	255
Asp Cys Gly Lys Cys Phe Arg Gly Arg Ser His Phe Phe Arg His Asn		
260	265	270
Arg Thr His Thr Gly Glu Lys Pro Tyr His Cys Leu Asp Cys Gly Lys		
275	280	285
Ser Phe Ser His Ser Ser His Leu Ile Lys His Gln Arg Thr His Arg		
290	295	300
Gly Val Arg Pro Tyr Ala Cys Pro Leu Cys Gly Lys Ser Phe Ser Arg		
305	310	315
Arg Ser Asn Leu His Arg His Glu Lys Ile His Thr Thr Gly Pro Lys		
325	330	335
Ala Leu Ala Met Leu Met Leu Gly Ala Ala Ala Gly Ala Leu Ala		
340	345	350
Thr Pro Pro Pro Ala Pro Thr		
355		

&lt;210&gt; 5777

&lt;211&gt; 1431

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5777

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gggagcgctt tctcccggga accgcggctg tgacccaagt ggcccggacc agtttggggc  
120

tgcgtgcggc ctgcctcaag caaccaggta cgtaggtcgg cggcccagct cggcgtgcg  
180

gtgggagccg gagggcgaca gtcagagccg gggtgccagc gggacgcgac cgccagatcc  
240

acttaggacc ccgtcgttct gcgaagcggc cacgtctgag tcccggggcc tcctcgtgct  
300

gcagatgtcg ccttaggacc tcggccagga taccctctgc catgctcttg tgctgcccg  
360

gatcacgcac tggcccttgt aagcaccttc gcagcaggaa gcccagagct gcgcctgccc  
420

tttctgaagg ctgtggaaga ggttggagtg ggcgcattct agcttgcccc atccccattt  
 480  
 gaggtctgtc ggagctgccc ttcagtgtga gcatccacaa tgggtacccc agcctcggtg  
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 600  
 gccaacatct tccaggacgc cgagctgctg cagatccaag ccctgtttca acgcagcggg  
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 840  
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 900  
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 960  
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 1380  
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 1431

&lt;210&gt; 5778

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5778

Met	Leu	Thr	Leu	Lys	Gly	Ser	Ser	Asp	Arg	Pro	Gln	Met	Gly	Met	Gly
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Gln	Ala	Lys	Met	Arg	Pro	Leu	Gln	Pro	Leu	Pro	Gln	Pro	Ser	Glu	Arg
			20					25					30		
Ala	Gly	Ala	Ala	Leu	Gly	Phe	Leu	Leu	Arg	Arg	Cys	Leu	Gln	Gly	Pro
			35					40					45		
Val	Gly	Asp	His	Gly	Gln	His	Lys	Ser	Met	Ala	Glu	Gly	Ile	Leu	Ala
			50				55				60				
Glu	Val	Leu	Arg	Arg	His	Leu	Gln	His	Glu	Glu	Ala	Pro	Gly	Leu	Arg
65					70					75				80	
Arg	Gly	Arg	Phe	Ala	Glu	Arg	Arg	Gly	Pro	Lys	Trp	Ile	Trp	Arg	Ser
			85					90						95	
Arg	Pro	Ala	Gly	Thr	Pro	Ala	Leu	Thr	Val	Ala	Leu	Arg	Leu	Pro	Pro

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          100          105          110
Gln Arg Arg Ala Gly Pro Pro Thr Tyr Val Pro Gly Cys Leu Arg Gln
          115          120          125
Ala Ala Arg Ser Pro Lys Leu Val Arg Ala Thr Trp Val Thr Ala Ala
          130          135          140
Val Pro Gly Arg Lys Arg Ser Leu Ala Pro Glu Gln Pro Ile Leu Gly
          145          150          155          160
Pro Ser Gln Val

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&lt;210&gt; 5779

&lt;211&gt; 371

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5779

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120
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180
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240
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300
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360
gtgtgcagtg t
371

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&lt;210&gt; 5780

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5780

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Leu Leu Arg Arg Val Glu Gly Arg Lys Gly Arg Thr His Asp Leu Pro
 1          5          10          15
Gln Arg His Gly Arg Glu Arg Gly Val Ile Ser Ala Leu Ser Gly Ile
          20          25          30
Pro Cys Val Cys Xaa Arg Val Cys Ala His Gly Asn Val Cys Gly Cys
          35          40          45
Val Cys Val His Ala Ala Val Cys Gly Cys Ala Xaa Val Cys Gly Cys
          50          55          60
Val Gly Val Cys Gly Cys Val His Gln Cys Arg Cys Ala Trp Val Cys
65          70          75          80
Thr Gly Gly Cys Val Tyr Val Cys Gly Gly Val Pro Ile Cys Ala Gly
          85          90          95
Val Trp Val Cys Arg Val Xaa Cys Leu Cys Val Gly Val Xaa Pro Cys
          100          105          110
Val Pro Leu Trp Arg Cys Val Gly Val Cys Ser
          115          120

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<210> 5781  
 <211> 845  
 <212> DNA  
 <213> Homo sapiens

<400> 5781  
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 120  
 ccaccaggtg aggatggcac tgcaacatct tccactgagg ctccagctgc cctctcaggt  
 180  
 acatcagggc ctgganctgc ctctctcca ggagggccag gactcggccc cctgccagcc  
 240  
 cccgaagcat tgcagccagg agtgcagcgt gggggccctg caggccatgg ccaggcccca  
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 gcgccaccag caccaggtca ggctggaagc cataggccag gggcagcacc aagcccaaga  
 360  
 tgcagctcag gaaaccaccg gtcattactg gcagtggcgt ggagacatgg aacatggata  
 420  
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 480  
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 720  
 gaggtggag tggctgctat accactgttc acctgtggga tgaataaaca gtggagaatg  
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 840  
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 845

<210> 5782  
 <211> 147  
 <212> PRT  
 <213> Homo sapiens

<400> 5782  
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 20 25 30  
 Ala Pro Thr Leu Ala Asp Phe Lys Pro Pro Gly Glu Asp Gly Thr Ala  
 35 40 45  
 Thr Ser Ser Thr Glu Ala Pro Ala Ala Leu Ser Gly Thr Ser Gly Pro  
 50 55 60  
 Gly Xaa Ser Ser Pro Pro Gly Gly Pro Gly Leu Gly Pro Leu Pro Ala  
 65 70 75 80  
 Pro Glu Ala Leu Gln Pro Gly Val Gln Arg Gly Gly Pro Ala Gly His

	85		90		95										
Gly	Gln	Ala	Pro	Ala	Pro	Pro	Ala	Pro	Gly	Gln	Ala	Gly	Ser	His	Arg
		100					105						110		
Pro	Gly	Ala	Pro	Ser	Pro	Arg	Cys	Ser	Ser	Gly	Asn	His	Arg	Ser	
	115					120					125				
Ser	Leu	Ala	Val	Ala	Trp	Arg	His	Gly	Thr	Trp	Ile	Gly	Gln	Pro	Pro
	130					135					140				
Pro	Cys	Pro													
145															

&lt;210&gt; 5783

&lt;211&gt; 1839

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5783

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120
gctgggactc tccttcttag tacacaccga ctgatttga gagatcagaa aaatcatgag
180
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1140

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 1260  
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 1839

&lt;210&gt; 5784

&lt;211&gt; 386

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5784

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Leu	Val	Ile	Gln	Gln	Arg	Gly	Val	Arg	Ile	Tyr	Asp	Gly	Glu	Glu	Lys
			20					25					30		
Ile	Lys	Phe	Asp	Ala	Gly	Thr	Leu	Leu	Leu	Ser	Thr	His	Arg	Leu	Ile
		35					40					45			
Trp	Arg	Asp	Gln	Lys	Asn	His	Glu	Cys	Cys	Met	Ala	Ile	Leu	Leu	Ser
		50				55					60				
Gln	Ile	Val	Phe	Ile	Glu	Glu	Gln	Ala	Ala	Gly	Ile	Gly	Lys	Ser	Ala
65					70					75				80	
Lys	Ile	Val	Val	His	Leu	His	Pro	Ala	Pro	Pro	Asn	Lys	Glu	Pro	Gly
				85					90					95	
Pro	Phe	Gln	Ser	Ser	Lys	Asn	Ser	Tyr	Ile	Lys	Leu	Ser	Phe	Lys	Glu
			100					105					110		
His	Gly	Gln	Ile	Glu	Phe	Tyr	Arg	Arg	Leu	Ser	Glu	Glu	Met	Thr	Gln
		115					120				125				
Arg	Arg	Trp	Glu	Asn	Met	Pro	Val	Ser	Gln	Ser	Leu	Gln	Thr	Asn	Arg
		130				135					140				
Gly	Pro	Gln	Pro	Gly	Arg	Ile	Arg	Ala	Val	Gly	Ile	Val	Gly	Ile	Glu
145					150					155				160	
Arg	Lys	Leu	Glu	Glu	Lys	Arg	Lys	Glu	Thr	Asp	Lys	Asn	Ile	Ser	Glu
				165				170					175		
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[illegible]

<210> 5785

<211> 785

<212> DNA

<213> Homo sapiens

<400> 5785

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180    ccttggccat ggcagcttgg ttgggacagc cgggccaaagg gaaaaaaagg tgcaaaagtc
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420    gcacaaagtt ctgcagccgg ggattggggg tcctctccac gtactgcaca ggccttggcc
480    cgccctcacc ggctgggccca ccatccagct gctgttgcac ctgctgccag gcttcggaca
540    caaagcggac attctccttg tgggccagtg tgtaggtctc ctgggtcccc tggagggatg
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 780  
 cgcgc  
 785

<210> 5786

<211> 159

<212> PRT

<213> Homo sapiens

<400> 5786

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Arg	Ser	His	Ala	Ala	Ala	Gly	Glu	Gly	Pro	Ala	Pro	Gly	Ala	Pro	Glu
			20					25					30		
Lys	Pro	Ala	Ala	Arg	Ala	Ala	Asp	Leu	Ala	Ala	Pro	Ala	Gly	Ala	Ala
			35				40					45			
Leu	Ala	Gln	Pro	Leu	Gly	Pro	Trp	Pro	Leu	Ser	Ser	Ala	Gly	Pro	Arg
			50			55					60				
Leu	Val	Phe	Asn	Arg	Val	Asn	Arg	Arg	Arg	Asp	Pro	Ser	Lys	Ser	Pro
65					70					75					80
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<211> 1683

<212> DNA

<213> Homo sapiens

<400> 5787

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&lt;211&gt; 417

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5788

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&lt;400&gt; 5790

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&lt;213&gt; Homo sapiens

&lt;400&gt; 5791

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<211> 209

<212> PRT

<213> Homo sapiens

<400> 5794

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Leu	Ser	Val	Val	Gly	Gly	Lys	Cys	Thr	Asn	Cys	Leu	Glu	Asp	Glu	Ser
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<210> 5795

<211> 993

<212> DNA

<213> Homo sapiens

<400> 5795

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&lt;210&gt; 5796

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5796

Met	Ala	Ala	Ser	Met	His	Gly	Gln	Pro	Ser	Pro	Ser	Leu	Glu	Asp	Ala
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Lys	Leu	Arg	Arg	Pro	Met	Val	Ile	Glu	Ile	Ile	Glu	Lys	Asn	Phe	Asp
			20					25					30		
Tyr	Leu	Arg	Lys	Glu	Met	Thr	Gln	Asn	Ile	Tyr	Gln	Met	Ala	Thr	Phe
			35				40					45			
Gly	Thr	Thr	Ala	Gly	Phe	Ser	Gly	Ile	Phe	Ser	Asn	Phe	Leu	Phe	Arg
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Arg	Cys	Phe	Lys	Val	Lys	His	Asp	Ala	Leu	Lys	Thr	Tyr	Ala	Ser	Leu
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Ala	Thr	Leu	Pro	Phe	Leu	Ser	Thr	Val	Val	Thr	Asp	Lys	Leu	Phe	Val
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Ile	Asp	Ala	Leu	Tyr	Ser	Asp	Asn	Ile	Ser	Lys	Glu	Asn	Cys	Val	Phe



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Pro	Leu	Pro	Pro	Lys	Gly	Arg	Val	Leu	Ile	His	Trp	Met	Thr	Leu	Cys
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Gln	Thr	Gln	Met	Lys	Leu	Met	Ala	Ile	Pro	Leu	Val	Phe	Gln	Ile	Met
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&lt;210&gt; 5797

&lt;211&gt; 405

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5797

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&lt;210&gt; 5798

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5798

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100

105

&lt;210&gt; 5799

&lt;211&gt; 4261

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5799

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&lt;210&gt; 5800

&lt;211&gt; 535

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5800

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Ile	Val	Gly	Asn	Ile	Ile	Gly	Ser	Gly	Ile	Phe	Val	Ser	Pro	Lys	Gly				
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Val	Leu	Glu	Asn	Ala	Gly	Ser	Val	Gly	Leu	Ala	Leu	Ile	Val	Trp	Ile				
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&lt;211&gt; 2418

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5801

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&lt;210&gt; 5802

&lt;211&gt; 350

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5802

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Asn Asp Tyr Phe Lys Glu Lys Asp Tyr Lys Lys Ala Val Ile Ser Tyr
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Thr Glu Gly Leu Lys Lys Lys Cys Ala Asp Pro Asp Leu Asn Ala Val
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&lt;210&gt; 5803

&lt;211&gt; 692

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5803

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&lt;210&gt; 5806

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5806

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105

&lt;210&gt; 5807

&lt;211&gt; 1429

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5807

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<211> 261

<212> PRT

<213> Homo sapiens

<400> 5808

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<211> 2009

<212> DNA

<213> Homo sapiens

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&lt;210&gt; 5812

&lt;211&gt; 463

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5812

Trp	Trp	Cys	Trp	Leu	Asp	Val	Gly	Gly	Phe	Thr	Gly	Pro	Ala	Val	Ser
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Glu	Arg	Ser	His	Ala	Val	Ile	Arg	Ser	Leu	Glu	Ala	Ala	Asp	Leu	Pro
			20					25					30		
Thr	Pro	Gln	Ala	Ile	Glu	Pro	Gln	Ala	Ile	Val	Gln	Gln	Val	Pro	Ala
			35					40					45		
Pro	Ser	Arg	Met	Gln	Met	Pro	Gln	Gly	Asn	Pro	Leu	Leu	Leu	Ser	His
			50				55				60				
Thr	Leu	Gln	Glu	Leu	Leu	Ala	Arg	Asp	Thr	Val	Gln	Val	Glu	Leu	Ile
65					70					75				80	
Pro	Glu	Lys	Lys	Gly	Leu	Phe	Leu	Lys	His	Val	Glu	Tyr	Glu	Val	Ser
			85					90						95	
Ser	Gln	Arg	Phe	Lys	Ser	Ser	Val	Tyr	Arg	Arg	Tyr	Asn	Asp	Phe	Val
			100					105					110		
Val	Phe	Gln	Glu	Met	Leu	Leu	His	Lys	Phe	Pro	Tyr	Arg	Met	Val	Pro

115	120	125
Ala Leu Pro Pro Lys Arg Met	Leu Gly Ala Asp Arg	Glu Phe Ile Glu
130	135	140
Ala Arg Arg Arg Ala Leu Lys Arg	Phe Val Asn Leu Val Ala Arg His	
145	150	155
Pro Leu Phe Ser Glu Asp Val Val	Leu Lys Leu Phe Leu Ser Phe Ser	
165	170	175
Gly Ser Asp Val Gln Asn Lys Leu Lys	Glu Ser Ala Gln Cys Val Gly	
180	185	190
Asp Glu Phe Leu Asn Cys Lys Leu Ala Thr	Arg Ala Lys Asp Phe Leu	
195	200	205
Pro Ala Asp Ile Gln Ala Gln Phe Ala Ile	Ser Arg Glu Leu Ile Arg	
210	215	220
Asn Ile Tyr Asn Ser Phe His Lys Leu Arg	Asp Arg Ala Glu Arg Ile	
225	230	235
Ala Ser Arg Ala Ile Asp Asn Ala Ala Asp	Leu Leu Ile Phe Gly Lys	
245	250	255
Glu Leu Ser Ala Ile Gly Ser Asp Thr Thr	Pro Leu Pro Ser Trp Ala	
260	265	270
Ala Leu Asn Ser Ser Thr Trp Gly Ser Leu Lys	Gln Ala Leu Lys Gly	
275	280	285
Leu Ser Val Glu Phe Ala Leu Leu Ala Asp	Lys Ala Ala Gln Gln Gly	
290	295	300
Lys Gln Glu Glu Asn Asp Val Val Glu Lys	Leu Asn Leu Phe Leu Asp	
305	310	315
Leu Leu Gln Ser Tyr Lys Asp Leu Cys Glu	Arg His Glu Lys Gly Val	
325	330	335
Leu His Lys His Gln Arg Ala Leu His Lys	Tyr Ser Leu Met Lys Arg	
340	345	350
Gln Met Met Ser Ala Thr Ala Gln Asn Arg	Glu Pro Glu Ser Val Glu	
355	360	365
Gln Leu Glu Ser Arg Ile Val Glu Gln Glu	Asn Ala Ile Gln Thr Met	
370	375	380
Glu Leu Arg Asn Tyr Phe Ser Leu Tyr Cys	Leu His Gln Glu Thr Gln	
385	390	395
Leu Ile His Val Tyr Leu Pro Leu Thr Ser	His Ile Leu Arg Ala Phe	
405	410	415
Val Asn Ser Gln Ile Gln Gly His Lys Glu	Met Ser Lys Val Trp Asn	
420	425	430
Asp Leu Arg Pro Lys Leu Ser Cys Leu Phe	Ala Gly Pro His Ser Thr	
435	440	445
Leu Thr Pro Pro Cys Ser Pro Pro Glu Asp	Gly Leu Cys Pro His	
450	455	460

&lt;210&gt; 5813

&lt;211&gt; 2991

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5813

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120



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 2991

&lt;210&gt; 5814

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5814

Ala	Ser	Ser	Glu	Glu	Leu	Lys	Ala	Ala	Tyr	Arg	Arg	Leu	Cys	Met	Leu
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Tyr	His	Pro	Asp	Lys	His	Arg	Asp	Pro	Glu	Leu	Lys	Ser	Gln	Ala	Glu
			20					25					30		
Arg	Leu	Phe	Asn	Leu	Val	His	Gln	Ala	Tyr	Glu	Val	Leu	Ser	Asp	Pro

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 Gln Thr Arg Ala Ile Tyr Asp Ile Tyr Gly Lys Arg Gly Leu Glu Met  
 50 55 60  
 Glu Gly Trp Glu Val Val Glu Arg Arg Arg Thr Pro Ala Glu Ile Arg  
 65 70 75 80  
 Glu Glu Phe Glu Arg Leu Gln Arg Glu Arg Glu Glu Arg Arg Leu Gln  
 85 90 95  
 Gln Arg Thr Asn Pro Lys Leu Cys Asp Asn Lys Leu Cys Ser Ala Val  
 100 105 110  
 Phe Ile Pro Trp Asn Pro Thr Arg Pro Asp His Cys Pro Ser Ser Glu  
 115 120 125  
 Pro Arg Gln Glu His Arg Gly Leu Pro Ala Val Ala Met Gly Tyr Pro  
 130 135 140  
 Val Ser His Glu His  
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<210> 5815  
 <211> 590  
 <212> DNA  
 <213> Homo sapiens

<400> 5815  
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<210> 5816  
 <211> 196  
 <212> PRT  
 <213> Homo sapiens

<400> 5816  
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 Lys Glu Arg Arg Lys Glu Ile Asp Leu Leu Leu Gly Gln Thr Asp Asp

35 40 45  
 Thr Arg Tyr His Val Leu Val Asn Leu Gly Leu Pro Ser Leu Phe Ser  
 50 55 60  
 Phe Gly Leu Val Asp Asp Ala His His Leu Ile Asn Ala Leu Arg Gln  
 65 70 75 80  
 Gln Ser Ile Thr Leu His Leu Val Asp Val Met Pro Val Leu Ile Thr  
 85 90 95  
 Leu Ser Ser Leu Gly Ser Ser Phe Leu Leu His Leu Arg Phe Gly Pro  
 100 105 110  
 Leu Ser Leu Val Ser His Thr Gly Ala Leu Gln Leu Pro Asn Lys Gly  
 115 120 125  
 Gln His Leu Ser Cys Gly Phe Ile Pro Ala Gly Pro Val Asn Glu Arg  
 130 135 140  
 Thr Val Ser Leu Glu His Lys Ile Arg Val Arg Leu Val Leu Val Leu  
 145 150 155 160  
 Gln Thr Thr Gly Gly Tyr Ile Arg His Gly Arg Gly Cys Ser Glu Ala  
 165 170 175  
 Ser Asp His His Ala Ser Ile Pro Gln Ala Ala Asn Gly Arg Arg Ser  
 180 185 190  
 Leu Leu Leu Ala  
 195

<210> 5817  
 <211> 648  
 <212> DNA  
 <213> Homo sapiens

<400> 5817  
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 120  
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 240  
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<210> 5818  
 <211> 191  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5818

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 20 25 30  
 Met Asn Asn Gly Ser Pro Thr Ala Leu Ser Gly Ser Lys Thr Asn Ser  
 35 40 45  
 Pro Lys Asn Ser Val His Lys Leu Asp Val Ser Arg Ser Pro Pro Leu  
 50 55 60  
 Met Val Lys Lys Asn Pro Ala Phe Asn Lys Gly Ser Gly Ile Val Thr  
 65 70 75 80  
 Asn Gly Ser Phe Ser Ser Ser Asn Ala Glu Gly Leu Glu Lys Thr Gln  
 85 90 95  
 Thr Thr Pro Asn Gly Ser Leu Gln Ala Arg Arg Ser Ser Ser Leu Lys  
 100 105 110  
 Val Ser Gly Thr Lys Met Gly Thr His Ser Val Gln Asn Gly Thr Val  
 115 120 125  
 Arg Met Gly Ile Leu Asn Ser Asp Thr Leu Gly Asn Pro Thr Asn Val  
 130 135 140  
 Arg Asn Met Ser Trp Leu Pro Asn Gly Tyr Val Thr Leu Arg Asp Asn  
 145 150 155 160  
 Lys Gln Lys Glu Gln Ala Gly Glu Leu Gly Gln His Asn Arg Leu Ser  
 165 170 175  
 Pro Met Ile Met Ser Ile Thr Val Leu His Asp Glu Leu Asp Asp  
 180 185 190

&lt;210&gt; 5819

&lt;211&gt; 1652

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5819

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 120  
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 180  
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 300  
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 360  
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 420  
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 480  
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ggactccgga atactctgac tcgaatacga aaatggattg aacattccaa actgagagaa  
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 720  
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 1652

<210> 5820

<211> 274

<212> PRT

<213> Homo sapiens

<400> 5820

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			20					25					30		
Pro	Lys	Asn	Asp	Ala	Asp	Asp	Glu	Ser	Glu	Thr	Pro	Glu	Glu	Leu	Glu
			35				40					45			
Glu	Glu	Ile	Pro	Val	Val	Ile	Cys	Ala	Ala	Ala	Gly	Arg	Met	Gly	Ala
		50				55					60				
Thr	Met	Ala	Ala	Ile	Asn	Ser	Ile	Tyr	Ser	Asn	Pro	Asp	Ala	Asn	Ile
65					70					75				80	
Leu	Phe	Tyr	Val	Val	Gly	Leu	Arg	Asn	Thr	Leu	Thr	Arg	Ile	Arg	Lys

4983

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1980  
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2040  
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&lt;210&gt; 5822

&lt;211&gt; 712

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5822

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Lys	Ser	Pro	Thr	Ser	Leu	Lys	Arg	Glu	Thr	Tyr	Tyr	Leu	Ser	Asp	Ser					
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&lt;210&gt; 5823

&lt;211&gt; 2585

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5823

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<212> PRT

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 88

<212> PRT

<213> Homo sapiens

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			20					25					30		
Ser	Cys	Ser	Arg	Gly	Leu	Leu	Pro	Pro	Leu	Pro	Ile	Pro	Ser	Pro	Val
			35				40					45			
Lys	Cys	Leu	Cys	Phe	Ala	Tyr	Cys	Val	Trp	Met	Cys	Val	Cys	Val	Cys
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<212> DNA

<213> Homo sapiens

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